

# HCD-GNZ55D

## SERVICE MANUAL

*E Model*

**Ver. 1.1 2006. 10**



- HCD-GNZ55D is the tuner, deck, DVD and amplifier section in MHC-GNZ55D.

DVD Section	Model Name Using Similar Mechanism	HCD-GNZ7D/GNZ8D/GNZ9D
	DVD Mechanism Type	CDM74HF-DVBU101//C
	Optical Pick-up Name	KHM-310CAB/C2NP
Tape Deck Section	Model Name Using Similar Mechanism	NEW

### SPECIFICATIONS

#### Amplifier section

The following measured at AC 120, 127, 220, 240 V, 50/60 Hz

DIN power output (rated)

40 W + 40 W  
(4 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)

60 W + 60 W  
(4 ohms at 1 kHz, 10% THD)

Inputs

MIC (phone jack): Sensitivity 1 mV,  
impedance 10 kilohms

Outputs

VIDEO OUT (phono jack):  
max. output level  
1 Vp-p, unbalanced, Sync  
negative load impedance  
75 ohms

PHONES (stereo mini jack):  
Accepts headphones of  
8 ohms or more

FRONT SPEAKER: Use only the supplied speakers

#### Disc player section

System Compact disc and digital audio and video system

Laser Semiconductor laser  
(DVD:  $\lambda=650$  nm,  
CD:  $\lambda=790$  nm)

Emission duration:  
continuous  
Frequency response  
DVD (PCM 48 kHz):  
2 Hz – 22 kHz ( $\pm 1$  dB)  
CD: 2 Hz – 20 kHz ( $\pm 0.5$  dB)

Video color system format  
Latin American model:  
NTSC  
Other models: NTSC, PAL

– Continued on next page –

## DVD DECK RECEIVER

**9-887-296-02**

2006J04-1

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**Sony Corporation**

Home Audio Division

Published by Sony Techno Create Corporation

**SONY®**

## Tape deck section

Recording system 4-track 2-channel stereo  
Frequency response 50 – 13,000 Hz ( $\pm 3$  dB),  
using Sony TYPE I tape

## Tuner section

FM stereo, FM/AM superheterodyne tuner

## FM tuner section

Tuning range 87.5 – 108.0 MHz  
(50-kHz step)  
Antenna FM lead antenna  
Antenna terminals 75 ohm unbalanced  
Intermediate frequency 10.7 MHz

## AM tuner section

Tuning range Saudi Arabian model: 531 – 1,602 kHz (with the interval set at 9 kHz)  
Other models: 531 – 1,602 kHz (with the interval set at 9 kHz)  
530 – 1,710 kHz (with the interval set at 10 kHz)  
Antenna AM loop antenna  
Antenna terminals External antenna terminal  
Intermediate frequency 450 kHz

## General

Power requirements Saudi Arabian model: 120 – 127 V or 220 – 240 V AC,  
50/60 Hz  
Adjustable with voltage selector  
Thai model: 220 V AC, 50/60 Hz  
Other models: 120 V or 220 – 240 V AC,  
50/60 Hz  
Adjustable with voltage selector

Power consumption 45 watts

Dimensions (w/h/d) (Approx.)  
280 × 326 × 385.5 mm

Mass (Approx.) 6.4 kg

*Design and specifications are subject to change without notice.*

## SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ▲ OR DOTTED LINE WITH MARK ▲ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

**Notes on Chip Component Replacement**

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

**Flexible Circuit Board Repairing**

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

**UNLEADED SOLDER**

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

** : LEAD FREE MARK**

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.  
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.  
Soldering irons using a temperature regulator should be set to about 350 °C.  
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity  
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder  
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

**CAUTION**

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

**NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT**

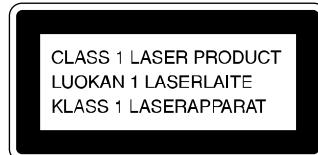
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

**NOTES ON LASER DIODE EMISSION CHECK**

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



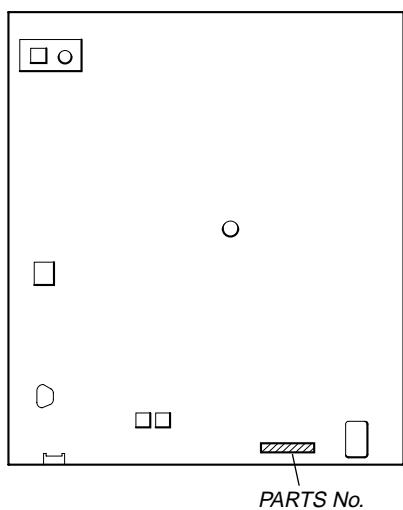
This appliance is classified as a CLASS 1 LASER product. This label is located on the rear exterior.

**NOTE ON REPLACEMENT OF DMB15 BOARD**

New part of EEPROM (IC103) on the DMB15 board cannot be used. Therefore, if the mounted DMB15 board (A-1167-778-A, etc.) is replaced, exchange new EEPROM (IC103) with that used before the replacement.

## MODEL IDENTIFICATION

- BACK PANEL -



- Abbreviation
  - E3 : 240 V AC area in E model
  - E12 : 220-240 V AC area in E model
  - E13 : 220-230 V AC area in E model
  - E15 : Iran model
  - EA : Saudi arabia model
  - PH : Philippine model
  - SP : Singapore model
  - TH : Thai model
  - MY : Malaysia model

MODEL	PARTS No.
E3, E15 models	2-663-832-0□
EA model	2-663-832-1□
MY, SP models	2-663-832-2□
E12, E13 models	2-663-832-3□
PH model	2-663-832-5□
TH model	2-663-832-6□

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This section is extracted  
from instruction manual.

### List of button locations and reference pages

#### How to use page 104 to 106

Use this page to find the location of buttons and other parts of the unit and remote that are mentioned in the text.

#### Illustration number

↓  
TAPE A/B **34** (60–62, 72, 75, 76)  
↑      ↑  
Name of button/part      Reference page

#### Unit

##### ALPHABETICAL ORDER

###### A — D

CD SYNC **8** (61)  
Deck A **28** (60)  
Deck B **17** (60–62, 75)  
DIRECTION **31** (60–62, 73, 75)  
DISC 1 ~ 3 **10** (25, 28, 29)  
DISC SKIP/EX-CHANGE **11**  
(18, 23, 25)  
Disc tray **7** (18, 19, 23, 26–29,  
33–36, 38, 69–71, 86, 87, 91)  
DISPLAY **40** (21, 76, 77)  
Display **4** (77)  
DVD **36** (18, 19, 21, 24, 25, 61,  
62, 67, 72, 76, 88)

###### E — O

ECHO LEVEL<sup>1)</sup> **22** (67)  
EQ BAND/MEMORY **3** (64)  
GROOVE **18** (63)  
ILLUMINATION **39** (58, 77, 90)  
IR Receptor **2** (17, 85)  
MASTER VOLUME **19** (24, 56,  
74, 77, 85)  
MIC<sup>2)</sup> (jack) **26** (67, 72, 85, 94)  
MIC 1<sup>1)</sup> (jack) **26** (67, 72, 85, 94)  
MIC 2<sup>1)</sup> (jack) **25** (67, 72, 85, 94)  
MIC LEVEL<sup>2)</sup> **24** (67, 72, 85)  
MIC 1 LEVEL<sup>1)</sup> **24** (67, 72, 85)  
MIC 2 LEVEL<sup>1)</sup> **23** (67, 72, 85)

##### P — Z

PHONES (jack) **20** (85, 94)  
Power illuminator **27** (77)  
PRESET EQ **29** (63, 64)  
REC PAUSE/START **6** (61, 62,  
72)  
SOUND FIELD **5** (65, 83)  
SUB WOOFER ON/OFF<sup>3)</sup> **37**  
(67)  
TAPE A/B **34** (60–62, 72, 75, 76)  
Tape lid **17** **28** (60)  
TUNER/BAND **38** (57–59, 76)  
TUNING +/- **16** (57–59)  
TV/SAT<sup>1)</sup> **33** (62, 76, 84, 86)  
VIDEO **32** (62, 76, 84)  
VIDEO INPUT<sup>1)</sup> (jacks) **21** (83,  
94)

##### SYMBOLS

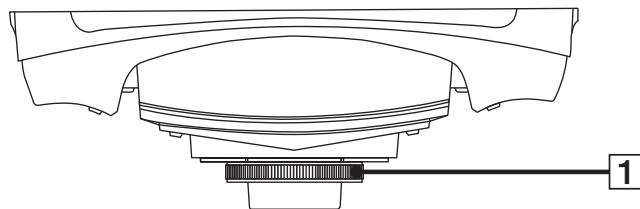
↓/↑ (on/standby) **38** (16, 18, 58,  
84, 90)  
▲ OPEN/CLOSE **9** (18, 19, 23,  
25, 86)  
▶ (play) **12** (24–27, 31, 33,  
35, 36, 38, 48, 51, 60–62, 73,  
75, 85, 87)  
◀◀ OPERATION DIAL ▶▶  
(go backward/forward) **1**  
(24, 32, 34, 39, 59, 62, 64, 65)  
◀◀▶ (rewind/fast forward)  
**16** (24, 60, 88)  
◀▶ **16** (25)  
■ (pause) **13** (16)  
■ (stop) **14** (61–62, 73, 86, 87,  
90)  
▲ PUSH (Eject A) **30** (60)  
▲ PUSH (Eject B) **15** (60)

<sup>1)</sup>Except for MHC-GNZ55D.

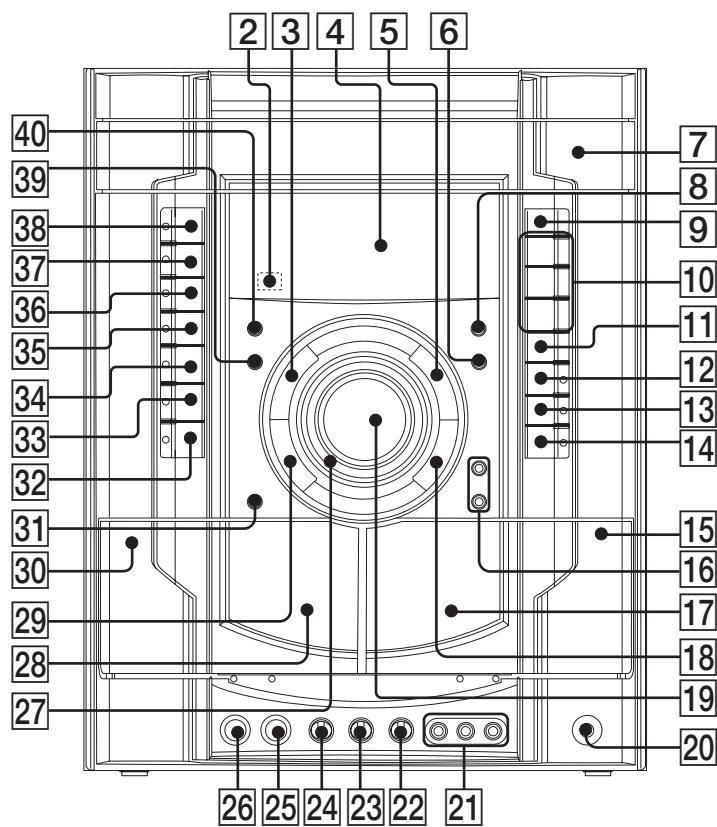
<sup>2)</sup>MHC-GNZ55D only.

<sup>3)</sup>MHC-GN999D/  
MHC-GN999DS only.

Top view



Front view



Additional Information

*continued* —

105<sup>GB</sup>

## Remote control

### ALPHABETICAL ORDER

A — L  
 ADVANCE  $\bullet\blacktriangleright$  [24] (25)  
 ALBUM  $+-$  [11] (20, 24)  
 ANGLE [10] (44)  
 AUDIO [8] (34, 43, 67, 70, 83)  
 CLEAR [28] (20, 27–30, 35, 41, 53)  
 DISC SKIP [3] (25, 28, 29)  
 DISPLAY [33] (21, 76, 77)  
 ENTER [26] (18–20, 27–31, 34, 36–39, 40, 42, 45–50,  
     53, 56–59, 68–71, 74–76, 90)  
 FM MODE [7] (59, 89)  
 FUNCTION  $+-$  [4] (19, 24, 57–60, 67, 75, 84, 88)  
 KARAOKE MODE [31] (68, 88)  
 KARAOKE PON [30] (68)  
 KEY CONTROL  $\#/\flat$  [32] (69)

### M — S

MENU [12] (30, 32, 34–36, 39, 57, 58)  
 Numeric Buttons<sup>1)</sup> [29] (17, 20, 21, 24, 30, 31, 41,  
     46–50, 59)  
 PICTURE NAVI [6] (35, 36, 41)  
 PRESET + [16] (57–59)  
 PRESET – [23] (57–59)  
 REPEAT [7] (30)  
 REPLAY  $\leftarrow$  [24] (25)  
 SCORE<sup>3)</sup> [5] (72)  
 SLEEP [35] (20, 74)  
 SLOW  $\blacktriangleright$  [17] (25)  
 SLOW  $\blacktriangleleft$  [22] (25)  
 SOUND FIELD [5]<sup>4)</sup> [13]<sup>3)</sup> (65, 83)  
 STEP  $\blacktriangleright$  [24] (25)  
 SUBTITLE [9] (44)

### T — Z

THEATRE SYNC [1] (21)  
 TIMER MENU [36] (18, 74–76)  
 TIME/TEXT [34] (77–79)  
 TOP MENU [27] (30)  
 TUNING + [17] (57–59)  
 TUNING – [22] (57–59)  
 TV<sup>2)</sup> [20] (17)  
 TV CH  $^{+2)}$  [16] (17)  
 TV CH  $^{-2)}$  [23] (17)  
 TV/VIDEO<sup>2)</sup> [35] (17)  
 TV VOL  $+-$ <sup>1)</sup><sup>2)</sup> [14] (17)  
 TV  $\text{I}/\text{O}$  (on/standby)<sup>2)</sup> [2] (17)  
 VOLUME  $+-$ <sup>1)</sup> [14] (24, 56, 74, 77, 85)

### NUMBERS AND SYMBOLS

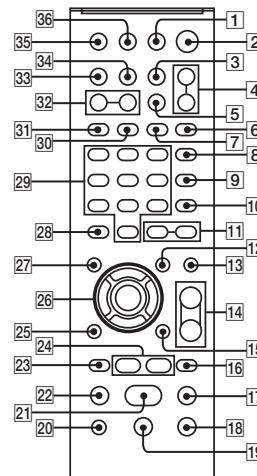
$\text{I}/\text{O}$  (on/standby) [2] (16, 18, 74, 75, 85)  
 ■ (stop) [18] (24, 26, 32, 34–36, 39, 45, 58, 60, 75, 86,  
     87)  
 ▶ (pause) [19] (24, 60)  
 $\triangleright$ <sup>1)</sup> (play) [21] (24–27, 31, 33, 35, 36, 38, 48, 51,  
     60, 75, 85, 87)  
 $\blacktriangleright\blacktriangleright$  (go forward) [16] (21, 24, 32, 34, 39)  
 $\blacktriangleleft\blacktriangleleft$  (go backward) [23] (24, 32, 34, 39)  
 $\blacktriangleright\blacktriangleright$  (fast forward) [17] (24, 60, 88)  
 $\blacktriangleleft\blacktriangleleft$  (rewind) [22] (24, 60, 88)  
 $\uparrow/\downarrow/\leftarrow/\rightarrow$  [26] (18, 19, 27–31, 33–42, 45–50, 56, 65,  
     68–72, 74–76, 90)  
 10/0<sup>(2)</sup> [29]  
 -/-<sup>(2)</sup> [28] (17)  
 $\text{S}\text{C}$  RETURN [25] (31, 34, 39, 42)  
 $\text{D}\text{I}$  DISPLAY [15] (9, 20, 26–31, 36, 37, 40–42, 45, 47,  
     49, 56, 68–72, 80, 90)  
 $\blacktriangleleft\blacktriangleright$  STEP [24] (25)

1) The numeric button 5, TV VOL +, VOLUME + and  
 $\triangleright$  buttons have a tactile dot. Use the tactile dot as  
 a reference when operating the system.

2) This button is used to operate a Sony TV. For  
 details, see “Operating a Sony TV with the remote”  
 on page 17.

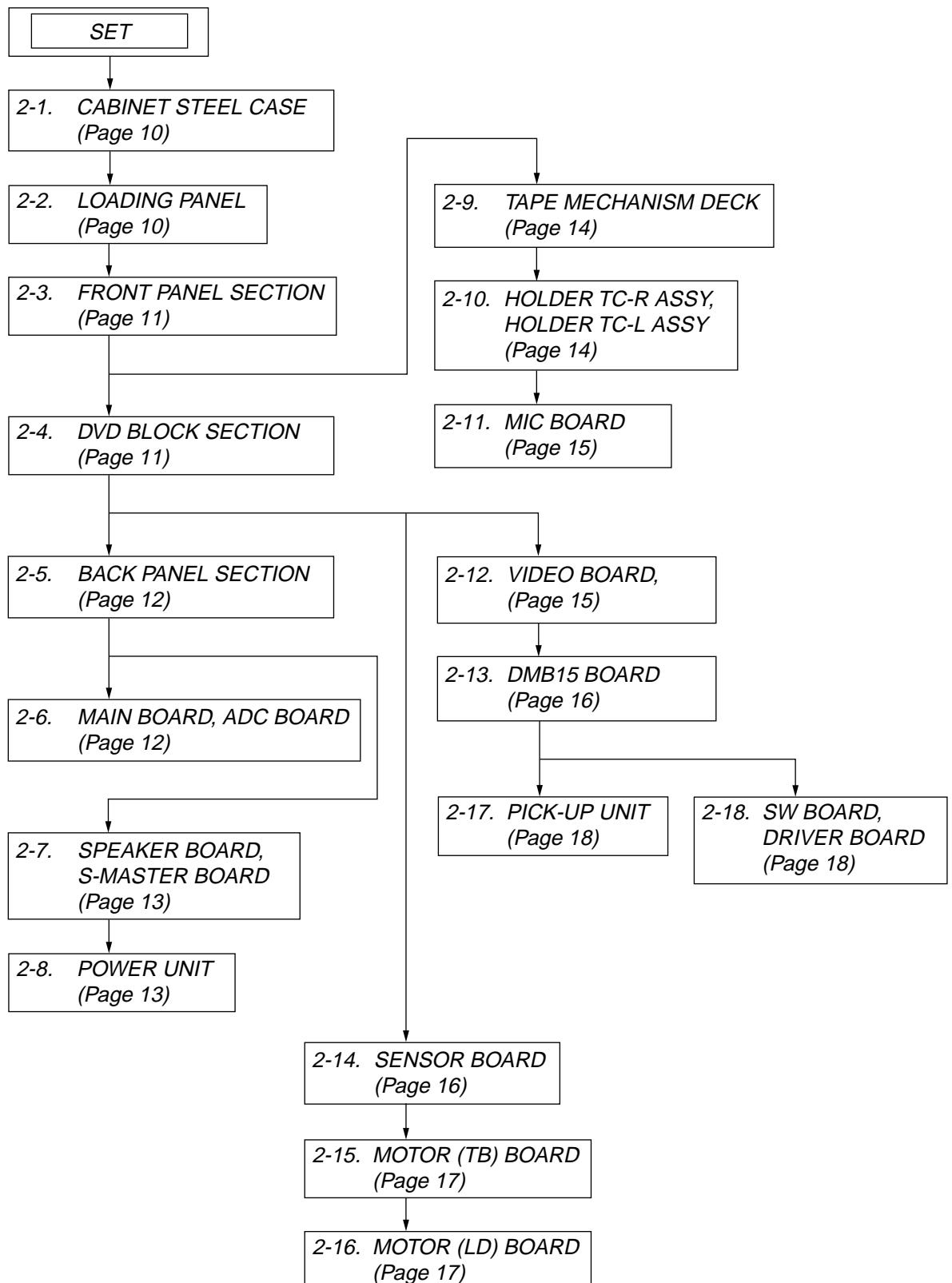
3) MHC-GN999D/MHC-GN999DS/  
 MHC-GNZ88D/MHC-GNZ77D only.

4) MHC-GNZ55D only.



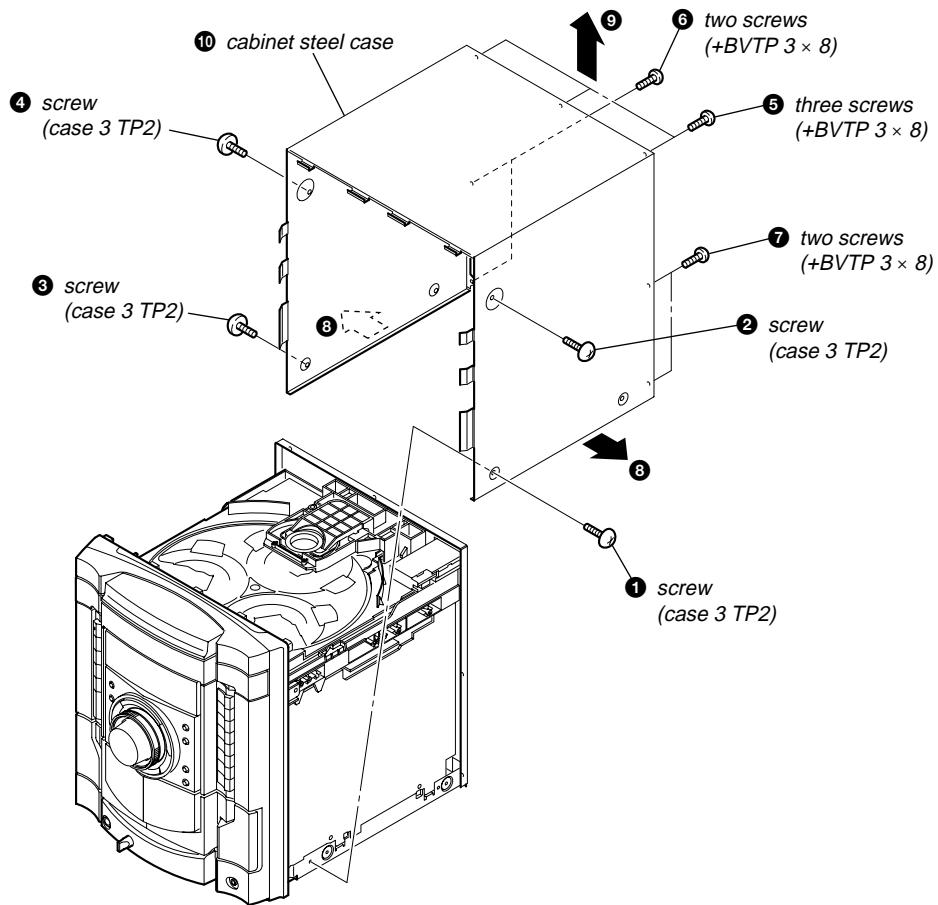
## SECTION 2 DISASSEMBLY

Note : Disassemble the unit in the order as shown below.

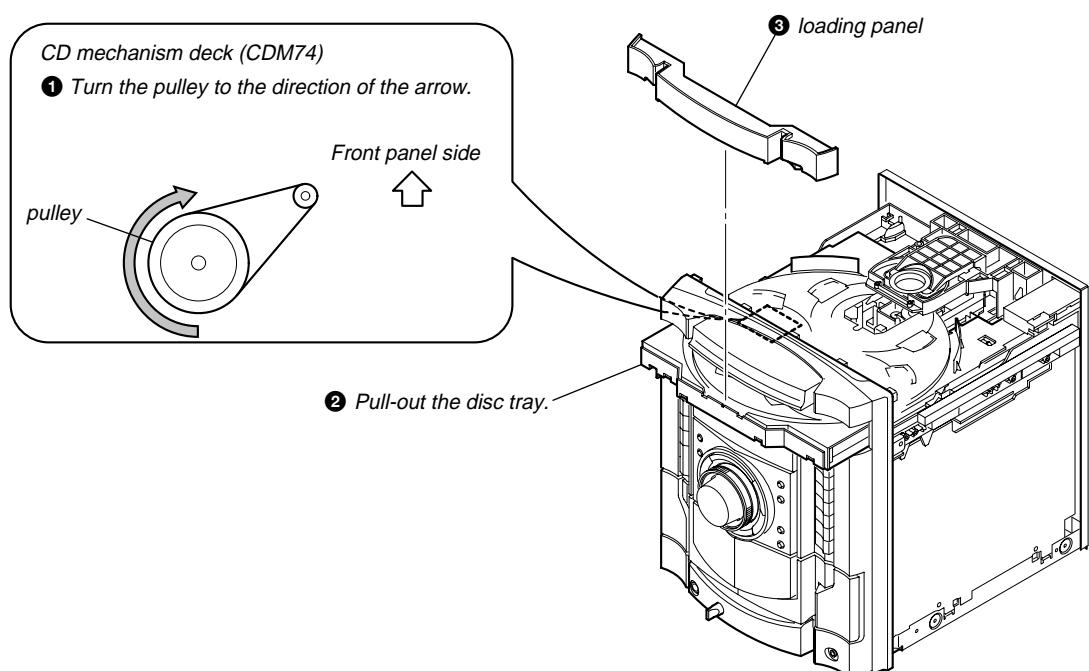


Note : Follow the disassembly procedure in the numerical order given.

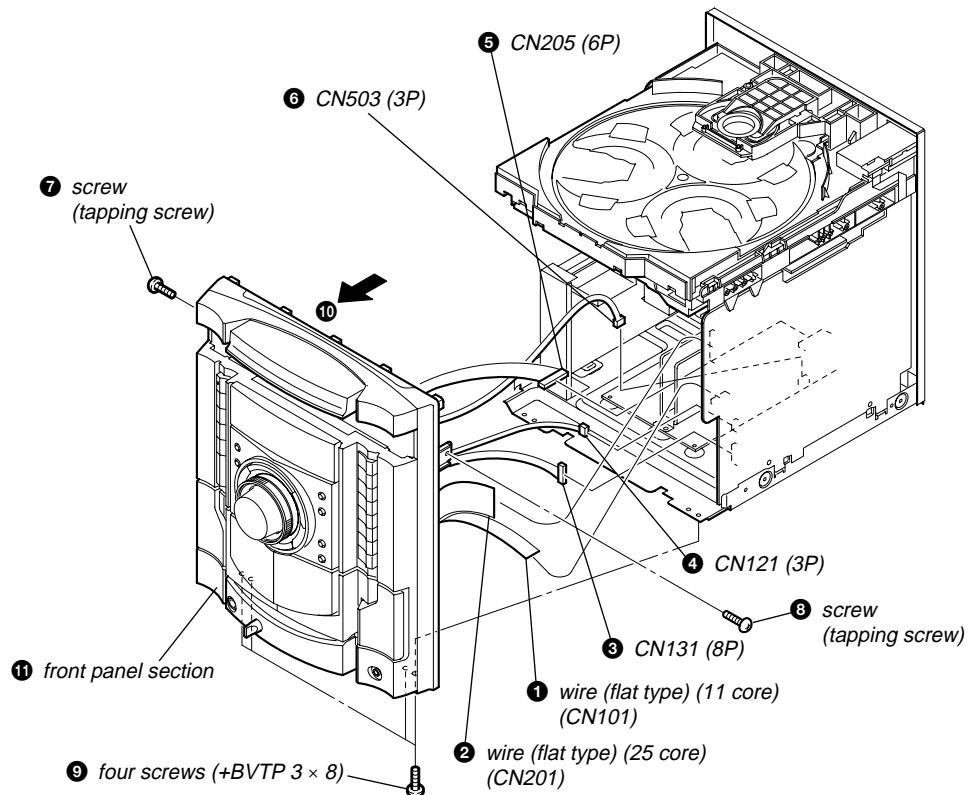
## 2-1. CABINET STEEL CASE



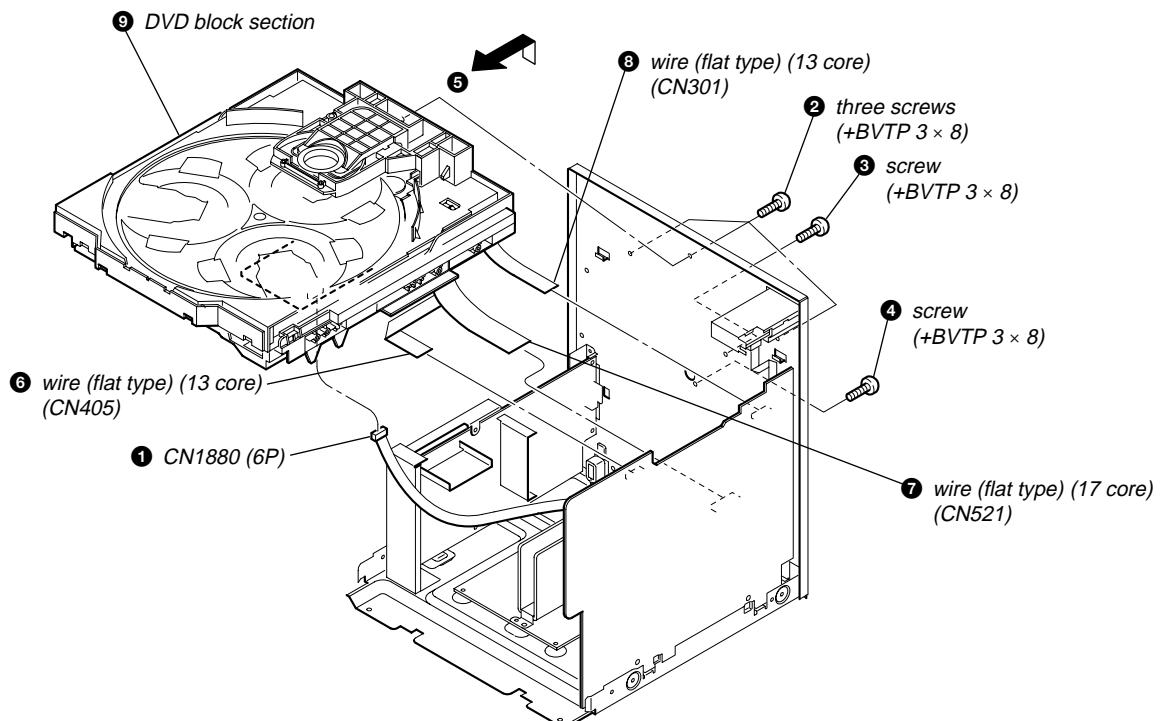
## 2-2. LOADING PANEL



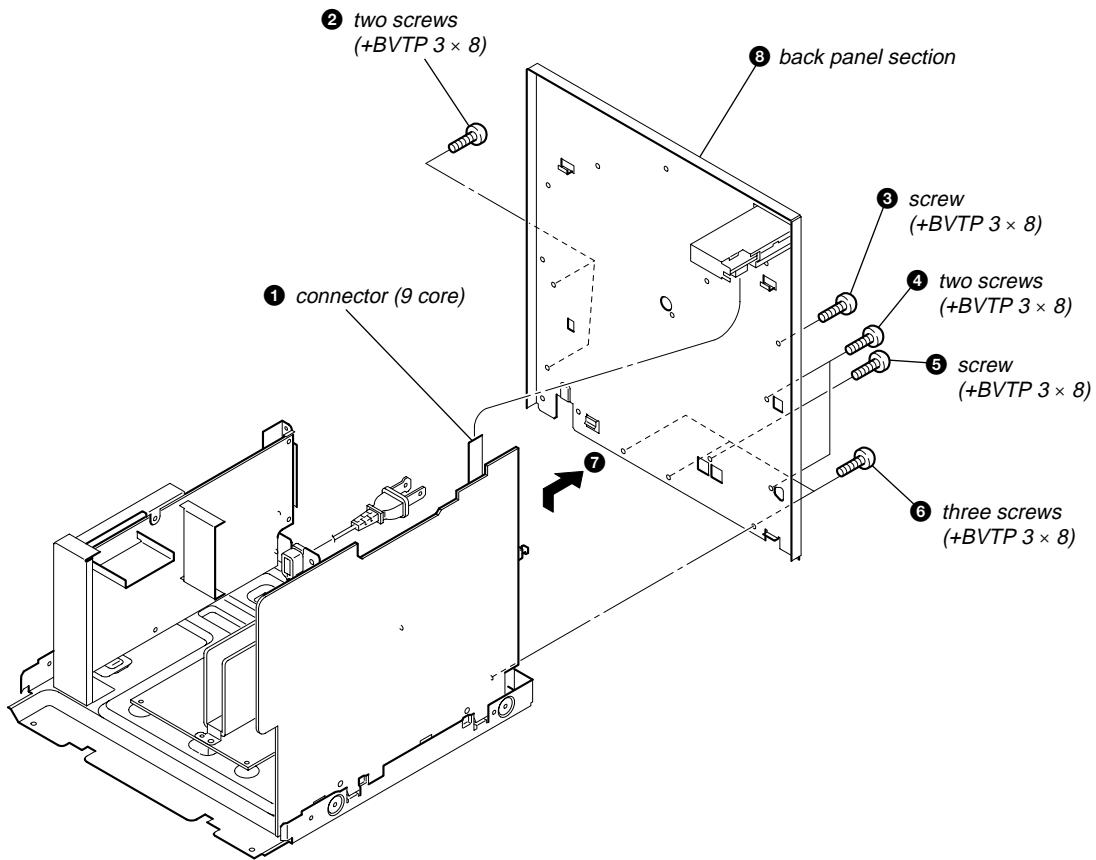
### 2-3. FRONT PANEL SECTION



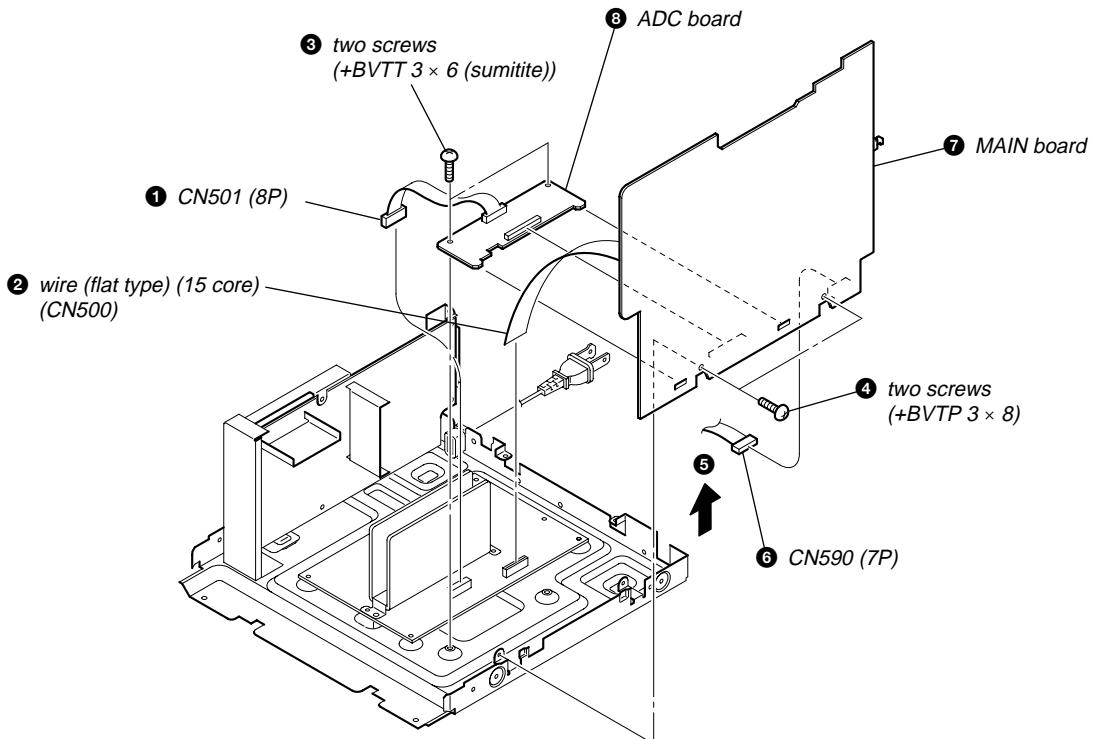
### 2-4. DVD BLOCK SECTION



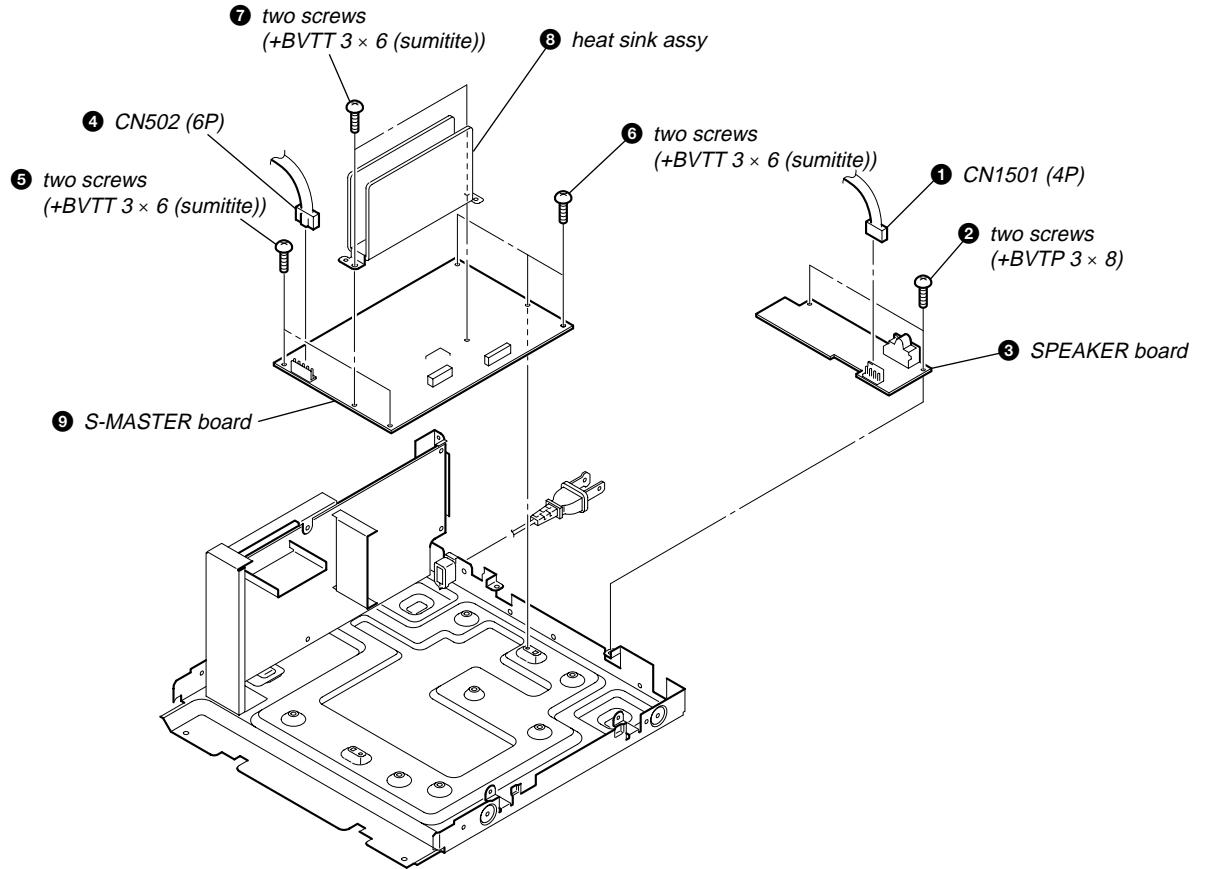
## 2-5. BACK PANEL SECTION



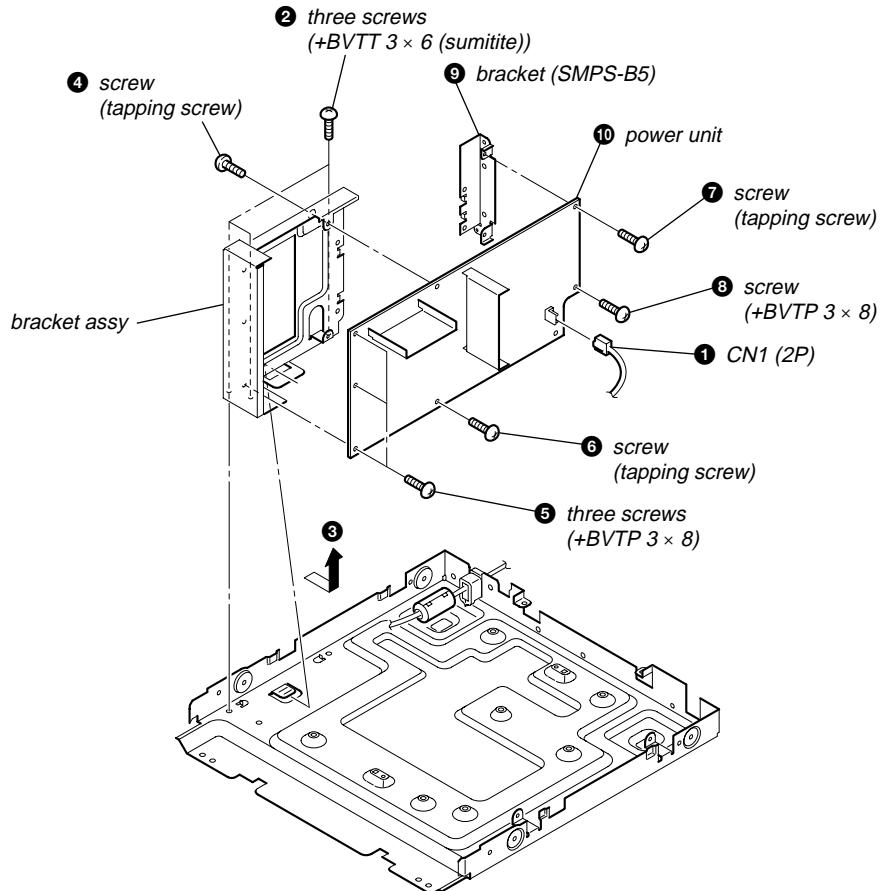
## 2-6. MAIN BOARD, ADC BOARD



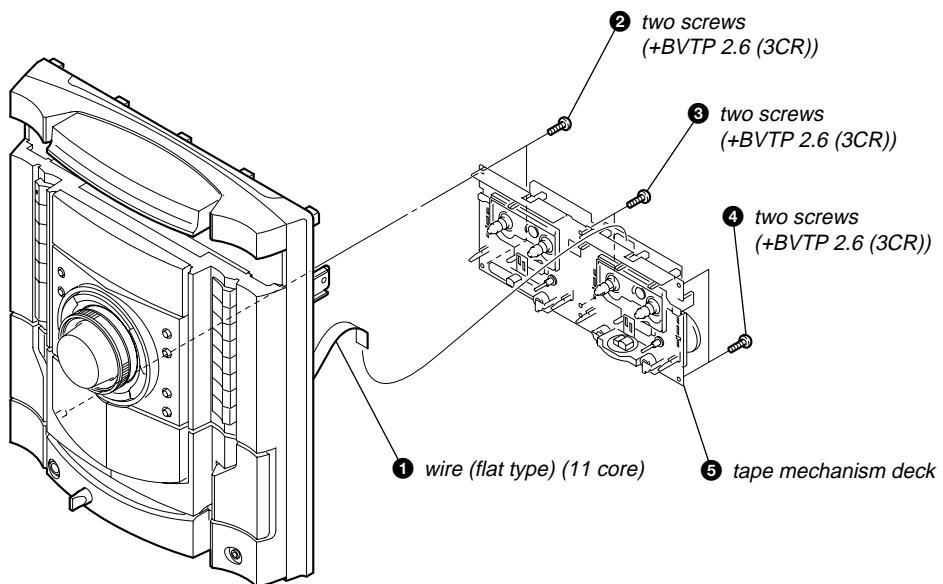
## 2-7. SPEAKER BOARD, S-MASTER BOARD



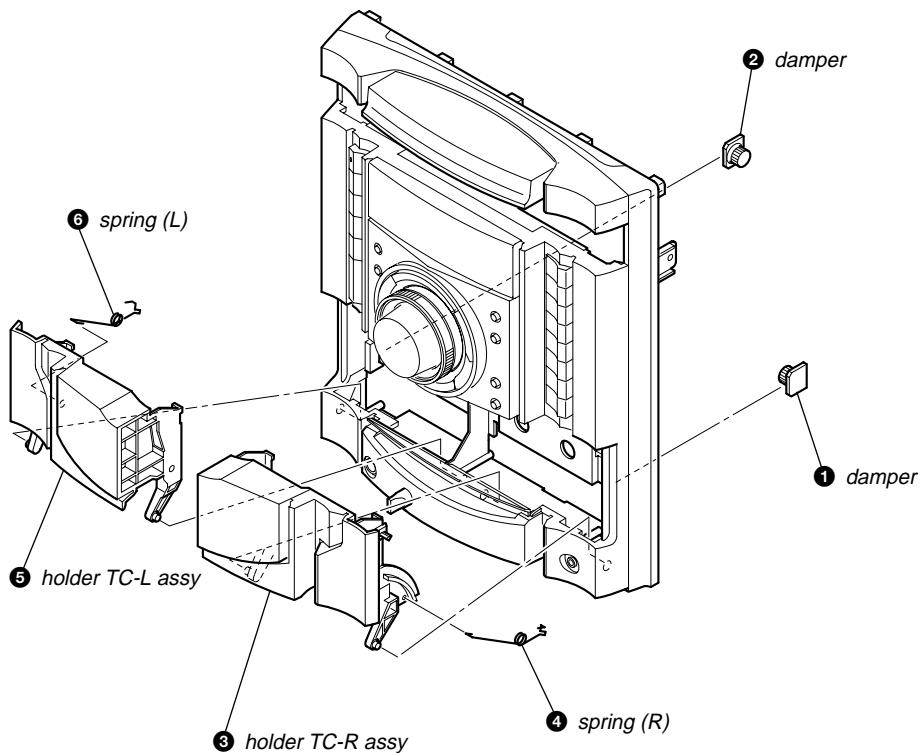
## 2-8. POWER UNIT



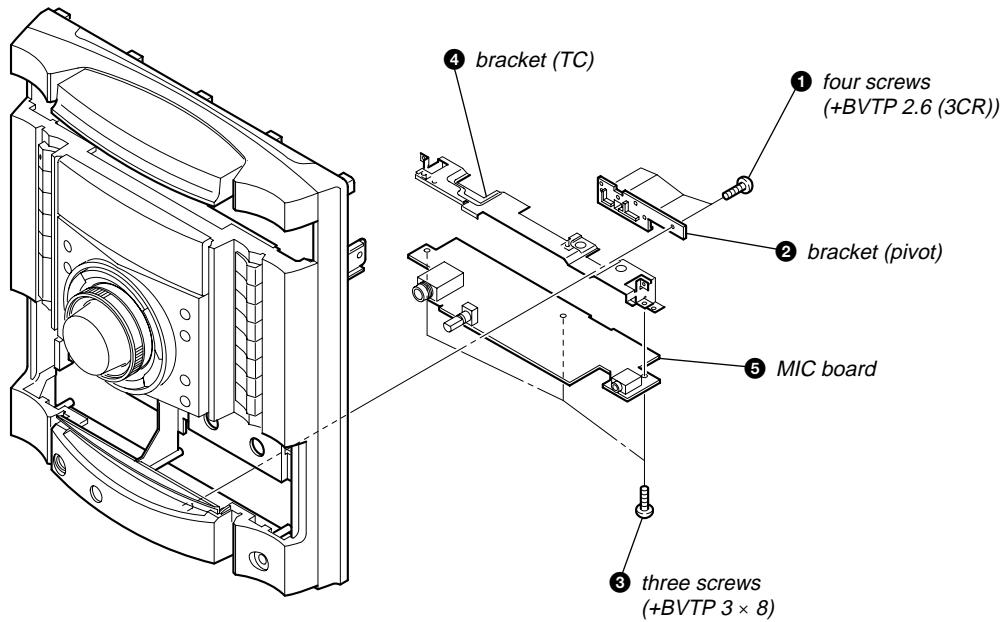
## 2-9. TAPE MECHANISM DECK



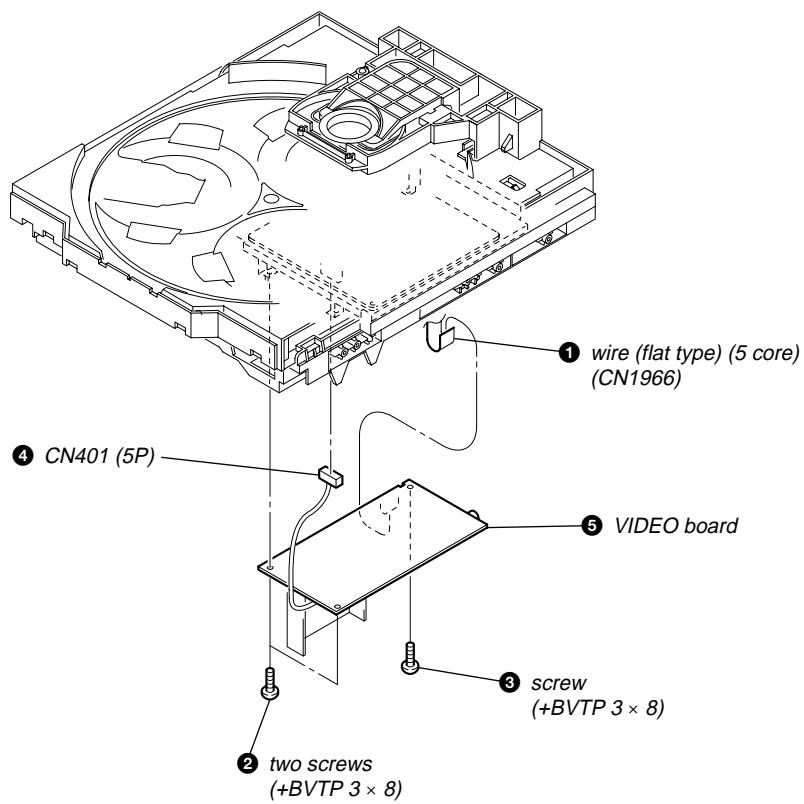
## 2-10. HOLDER TC-R ASSY, HOLDER TC-L ASSY



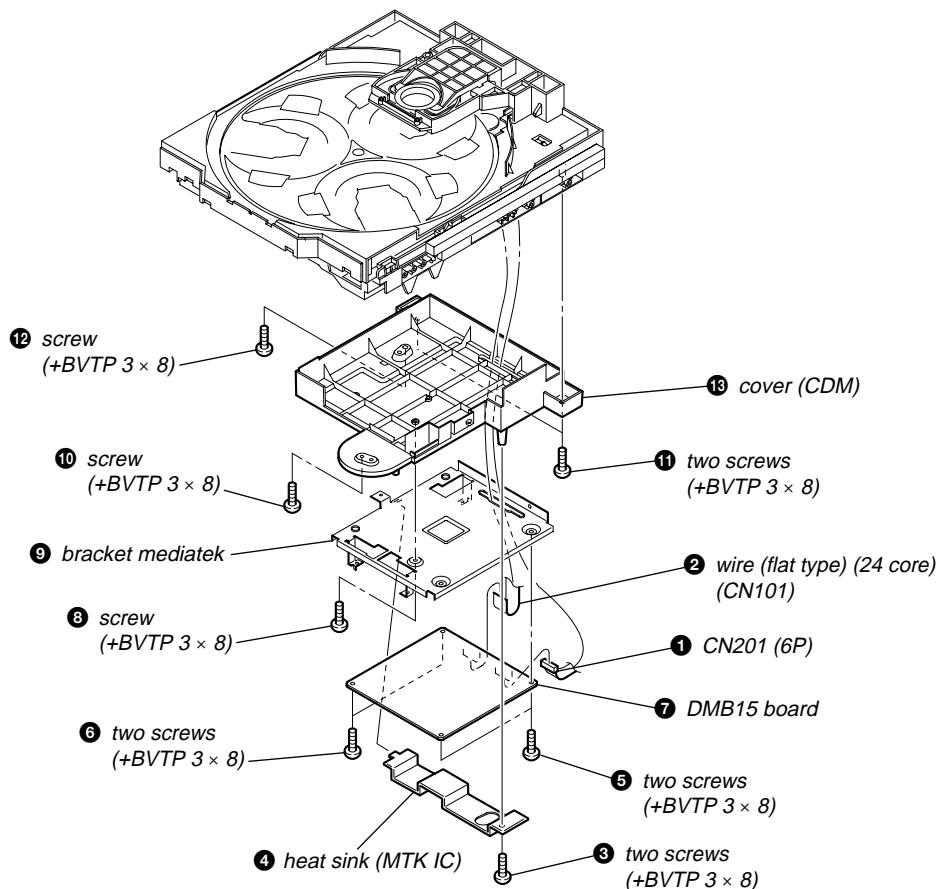
## 2-11. MIC BOARD



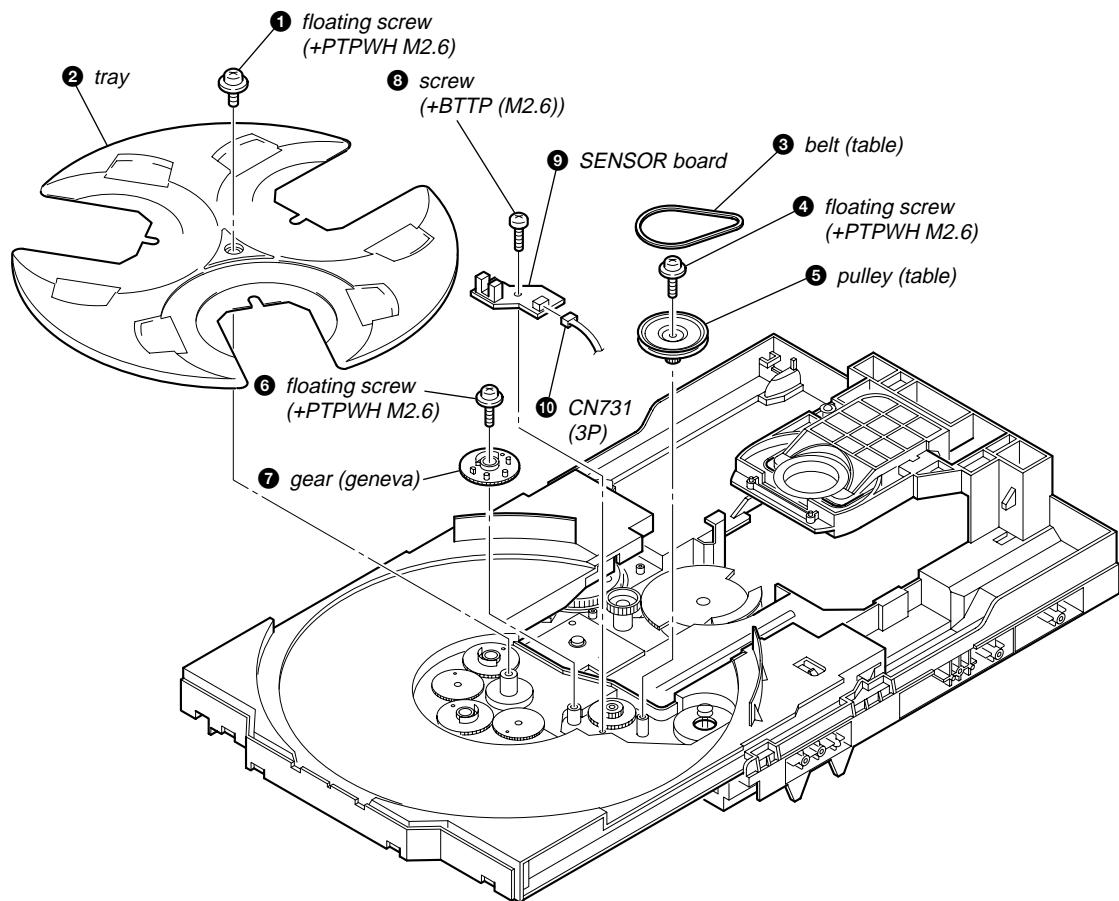
## 2-12. VIDEO BOARD



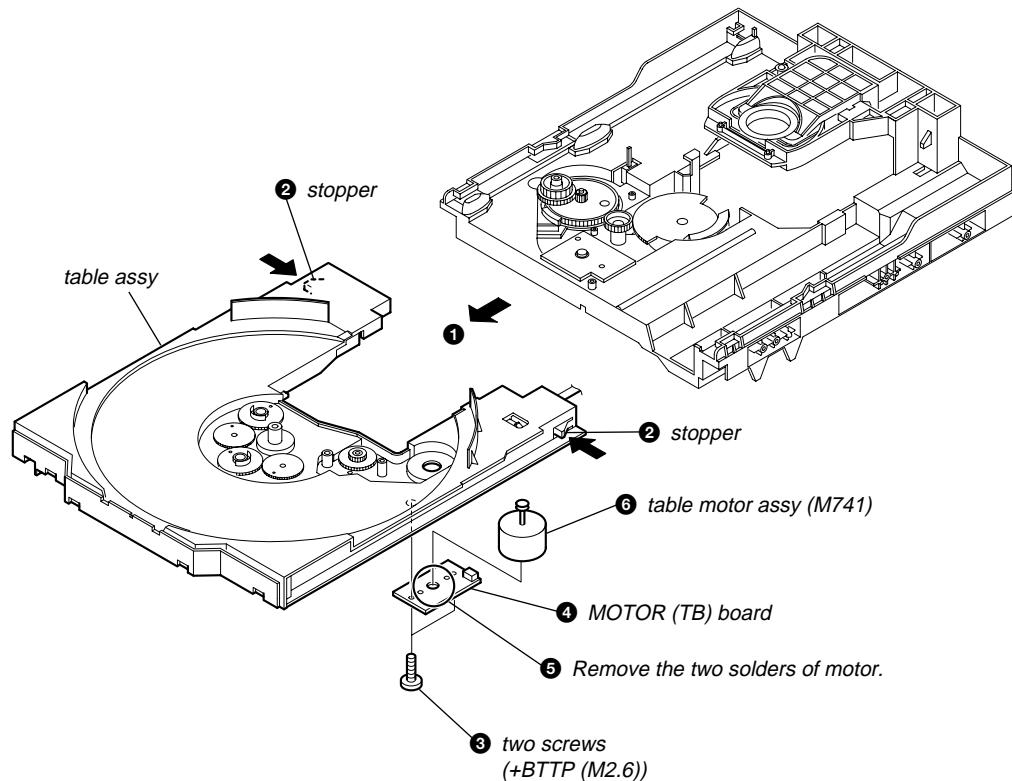
## 2-13. DMB15 BOARD



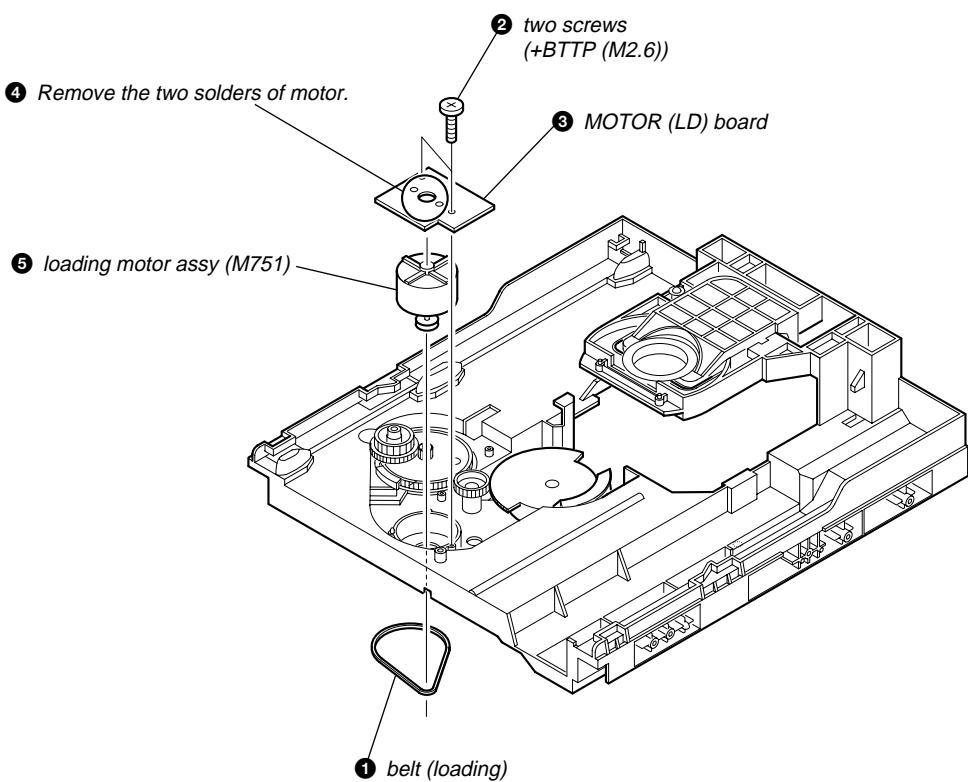
## 2-14. SENSOR BOARD



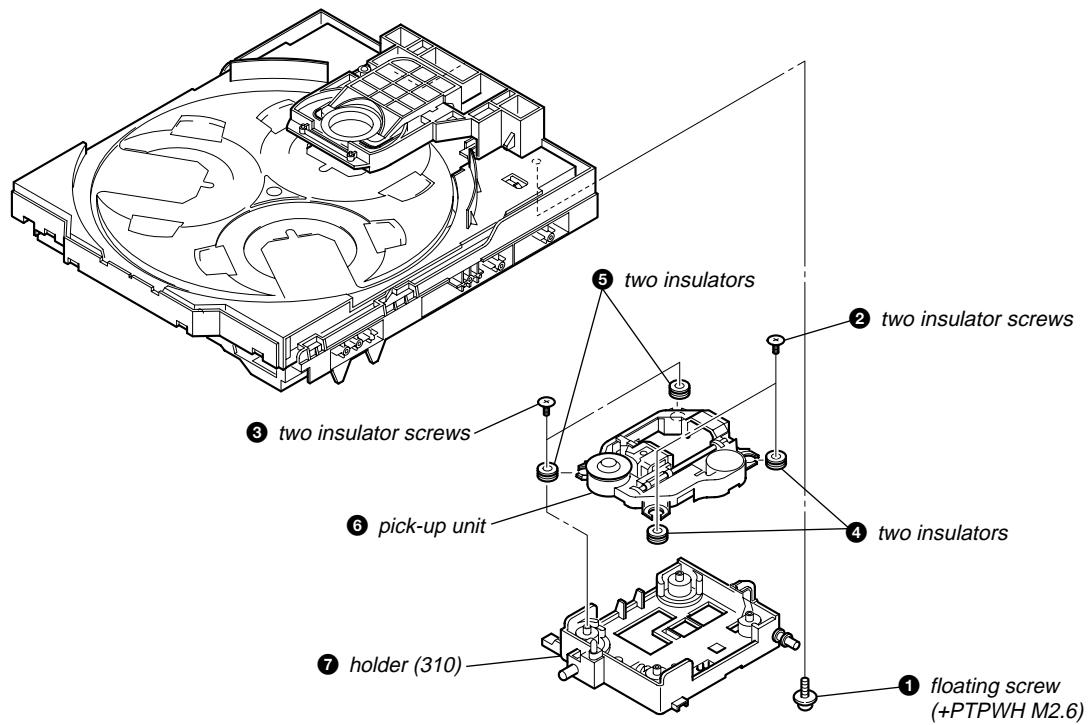
## 2-15. MOTOR (TB) BOARD



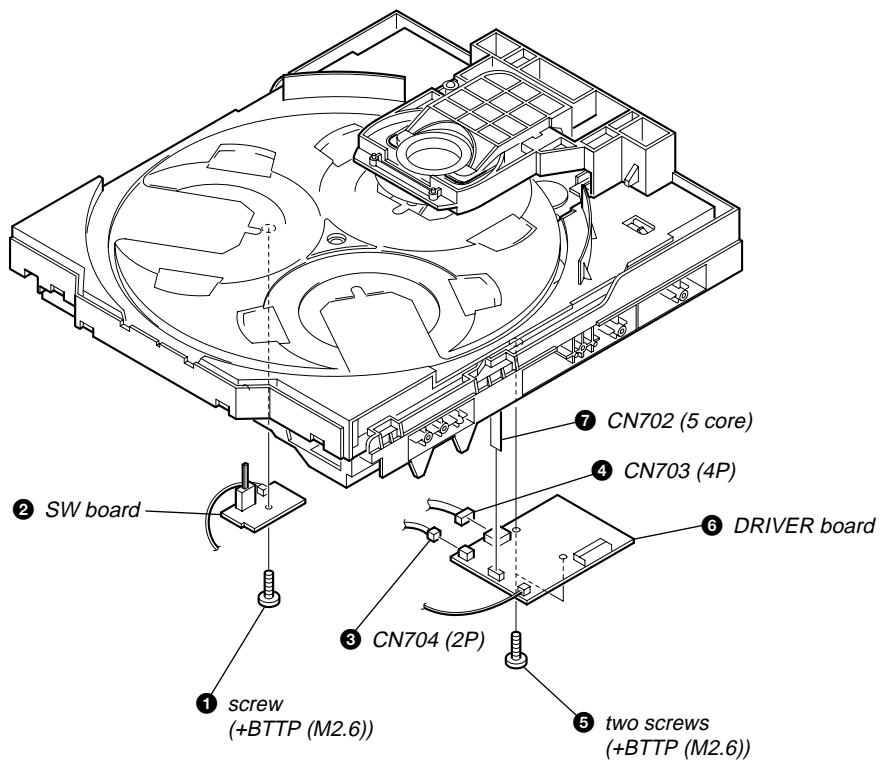
## 2-16. MOTOR (LD) BOARD



## 2-17. PICK-UP UNIT



## 2-18. SW BOARD, DRIVER BOARD



## SECTION 3

### TEST MODE

#### [PANEL TEST MODE]

- This mode is used to check the fluorescent indicator tube, LEDs, keys, VOLUME jog, model, destination, software version and VACS level.

#### Procedure:

1. Press **[■]** button, **[ILLUMINATION]** button and **[DISC 2]** button simultaneously.
2. All LEDs and segments in fluorescent indicator tube are lighted up.
3. When you want to enter to the software version dispaly mode, press **[DISC 1]** button. The model information appears on the fluorescent indicator tube. Press **[DISC 1]** button again to view the destination information.
4. Each time **[DISC 1]** button is pressed, the display changes from MC version, SYS version, UI version, DVD version, CDMA version, CDMB version, ST version, TA version, TM version, TC version in this order, and returns to the model version display.
5. When **[DISC 3]** button is pressed while the version numbers are being displayed except model and destination, the date of the software creation appears. When **[DISC 3]** button is pressed again, the display returns to the software version display. When **[DISC 1]** button is pressed while the date of the software creation is being displayed, the date of the software creation is displayed in the same order of software version display.
6. Press **[DISC 2]** button, the key check mode is activated.
7. In the key check mode, the fluorescent indicator tube displays "K 0 V0".

Turn the **[OPERATIONAL DIAL]** clockwise; "K" value increases by one. Turn the **[OPERATIONAL DIAL]** counterclockwise; "K" value increases by one. Each time a button is pressed, "K" value increases. Press other keys on main unit to check whether the key is detected. However, once a button has been pressed, it is no longer taken into account.

"V" value increases in the manner of 0, 1, 2, 3 ... if **[VOLUME]** knob is turned clockwise, or it decreases in the manner of 0, 9, 8, 7 ... if **[VOLUME]** knob is turned counterclockwise.

8. When **[DISC 3]** button is pressed after all LEDs and segments in fluorescent indicator tube light up, the fluorescent indicator tube displays "VACS A". A is VACS level which is triggered by signal level.
9. When **[DISC SKIP/EX-CHANGE]** button is pressed after all LEDs and segments in fluorescent indicator tube light up, alternate segments in fluorescent indicator tube would light up. If you press **[DISC SKIP/EX-CHANGE]** button again, another half of alternate segments in fluorescent indicator tube would light up. When **[DISC SKIP/EX-CHANGE]** button is pressed again, all segments lights off. Press **[DISC SKIP/EX-CHANGE]** button again would cause all segments lights up.
10. To release from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

#### [COMMON TEST MODE]

- This mode is used to check operations of the respective sections of Amplifier and Tape.

#### Procedure:

- To enter Common Test Mode

1. Press **[■]** button, **[ILLUMINATION]** button and **[DISC 3]** button simultaneously.
2. The DVD ring indicators and the line below DVD ring indicator flash synchronously on the fluorescent indicator tube.

#### • Check of Amplifier

1. Press **[EQ BAND/MEMORY]** button repeatedly until a message "GEQ MAX" appears on the fluorescent indicator tube. GEQ increases to its maximum.
2. Press **[EQ BAND/MEMORY]** button repeatedly until a message "GEQ MIN" appears on the fluorescent indicator tube. GEQ decreases to its minimum.
3. Press **[EQ BAND/MEMORY]** button repeatedly until a message "GEQ FLAT" appears on the fluorescent indicator tube. GEQ is set to flat.
4. When the **[VOLUME]** knob is turned clockwise even slightly, the sound volume increases to its maximum and a message "VOLUME MAX" appears on the fluorescent indicator tube.
5. When the **[VOLUME]** knob is turned counterclockwise even slightly, the sound volume decreases to its minimum and a message "VOLUME MIN" appears on the fluorescent indicator tube.

#### • Tape function

1. When a tape is inserted in Deck B and recording is started, the function is change to DVD automatically when a tape is inserted in Deck B and recording is started. When **[CD SYNC]** button is pressed during recording in function, ALC (Automatic Logic Control) is turned on.
2. During recording, press **[◀]** button will stop the recording and the function is changed to TAPE B and rewind the tape in Deck B until the recording start position and playback of the tape in Deck B is started. If the **[REC PAUSE/START]** button is pressed for a pause and pressed again to resume recording during recording time, when the tape is rewind, the tape will be rewind until the position where the pause is applied.

#### • To release from Common Test mode

1. To release from this mode, press **[I/O]** button.
2. The cold reset is enforced at the same time.

#### [COLD RESET]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

#### Procedure:

1. Press **[I/O]** button to turn on the system.
2. Press **[■]** button, **[ILLUMINATION]** button, and **[I/O]** button simultaneously.
3. The message "COLD RESET" appears on the fluorescent indicator tube. Then, the fluorescent indicator tube becomes blank for a while, and the system is reset.

#### [VACS ON/OFF]

- This mode is used to switch on and off the VACS (Variable Attenuation Control System).

#### Procedure:

1. Press **[I/O]** button to turn on the system.
2. Press **[■]** button, **[DIRECTION]** button and **[DISC 1]** button simultaneously. The message "VACS OFF" or "VACS ON" appears on the fluorescent indicator tube.

#### [TUNER STEP CHANGE]

- The step interval of AM channels can be toggled between 9 kHz and 10 kHz. This mode is not available for Saudi Arabia and Russia models.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Press **TUNER/BAND** button repeatedly to select the “AM”.
3. Press **I/O** button to turn off the system.
4. Press **ILLUMINATION** button and **I/O** button simultaneously. The system will turn on automatically. The message “AM 9K STEP” or “AM 10K STEP” appears on the fluorescent indicator tube and thus the channel step is changed.

**[DVD SHIP MODE (WITH MEMORY CLEAR)]**

- This mode moves the optical pick-up to the position durable to vibration and clears all data including preset data stored in the RAM to initial conditions. Use this mode when returning the set to the customer after repair.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Select DVD function.
3. Press **■** button, **DIRECTION** button and **I/O** button simultaneously during “DVD NO DISC” condition. The system will turn off automatically.
4. After the “STANDBY” blinking display finishes, a message “MECHA LOCK” appears on the fluorescent indicator tube and the DVD ship mode is set.

**[DVD SHIP MODE (WITHOUT MEMORY CLEAR)]**

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Select DVD function.
3. Press **DVD** button and **I/O** button simultaneously during “DVD NO DISC” condition. The system will turn off automatically.
4. After the “STANDBY” blinking display finishes, a message “MECHA LOCK” appears on the fluorescent indicator tube and the DVD ship mode is set.

**[DVD TRAY LOCK MODE]**

- This mode let you lock the disc tray. When this mode is activated, the disc tray will not open when **OPEN/CLOSE** button or **DISC SKIP/EX-CHANGE** button is pressed. The message “LOCKED” will appear on the fluorescent indicator tube.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Select DVD function.
3. Press **■** button and **OPEN/CLOSE** button simultaneously and hold down until “LOCKED” or “UNLOCKED” appears on the fluorescent indicator tube (around 5 seconds).

**[TCM OFFLINE MODE]**

- This mode prevents the system from turning off automatically when TCM is not connected. Therefore, measurements can be done even when TCM is not connected during production.

**Procedure:**

1. When the system is turned off, press **EQ BAND/MEMORY** button, **TAPE A/B** button and **I/O** button simultaneously. The system will turn on automatically.
  2. The message “TCM OFFLINE” will appear on the fluorescent indicator tube.
- 
- To release from TCM Offline Mode  
To release from this mode, perform “COLD RESET” or turn off the power supply.

**[DVD COLOR SYSTEM]**

- This mode let you change the color system of the video output from PAL to NTSC or vice-versa. This mode is not available for Latin American and Russian models.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Select DVD function.
3. Press **I/O** button again to turn off the system.
4. Press **■** button and **I/O** button simultaneously. The system will turn on automatically.  
The message “COLOR PAL” or “COLOR NTSC” appears on the fluorescent indicator tube.

**[REMOTE DISABLE MODE]**

- This mode let you disable the remote commander reception. When this mode is activated, the system will not respond if the button on the remote commander is pressed. The message “RM DISABLE” appears on the fluorescent indicator tube.  
This mode is essential for conducting test and repairing when no interruption from the other remote commander is expected. This mode is cancelled automatically when the system is turned off.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Press **■** button, **DIRECTION** button and **DISC 3** button simultaneously until “SIRCS ON” or “SIRCS OFF” appears on the fluorescent indicator tube.

**[MTK FIRMWARE DISPLAY]**

- This mode is used to display the MTK firmware version.

**Procedure:**

1. Press **I/O** button to turn on the system.
2. Press **DVD** button to switch to DVD function.
3. Press **I/O** button again to turn off the system.
4. Press **■** button and **I/O** button. The system turns on automatically.
5. The version of MTK firmware appears on the TV screen.

**[DVD SERVICE MODE]**

- This mode let you make diagnosis and adjustment easily by using the remote commander and the TV. The instructions, diagnostic results, etc. are given on the on-screen display.

### • TEST DISC LIST

Be sure to use the DVD disc that matches the signal standards of your region.

#### • CD

YEDES-18 (Part No.: 3-702-101-01)  
PATD-012 (Part No.: 4-225-203-01)

#### • DVD SL (Single Layer)

NTSC : HLX-503 (Part No.: J-6090-069-A)  
HLX-504 (Part No.: J-6090-088-A)

PAL : HLX-506 (Part No.: J-6090-077-A)

#### • DVD DL (Dual Layer)

NTSC : HLX-501 (Part No.: J-6090-071-A)  
HLX-505 (Part No.: J-6090-089-A)

PAL : HLX-507 (Part No.: J-6090-078-A)

### • Procedure to enter to DVD Service Mode:

1. Press **[I/O]** button to turn on the system.
2. Select DVD function.
3. Press **[■]** button and **[OPEN/CLOSE]** button simultaneously and then turn the **[VOLUME]** knob clockwise.
4. The message “SERVICE IN” appears on the fluorescent indicator tube and the Top Menu of Remocon Diagnosis Menu appears on the on-screen display on the TV. The model name and revision number is displayed at the bottom of the on-screen display.

#### Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History
4. Version Information

Model Name : GML6DS\_ME  
IF-con : Ver. 01.00 (0000)  
Syscon : Ver. 0.302

5. To execute each function, press its number by using numeric button on the remote commander.
6. To release from this mode, press **[I/O]** button to turn off the system.

### • Execute IOP Measurement

In order to execute mirror time adjustment, the following standard procedures must be followed.

1. From the Top Menu of Remocon Diagnosis Menu, select “2. Drive Manual Operation” by pressing the **[2]** button on the remote commander. The following screen appears on the on-screen display.

#### Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Mecha test Mode
5. MIRR time Adjust
0. Return to Top Menu

2. Select “3. Manual Adjustment” by pressing the **[3]** button on the remote commander. The following screen appears on the on-screen display.

#### Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eg Boost Adjust:
6. Iop:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

**[↑↓]** Change Value

**[RETURN]** Return to previous menu

3. Select “6. Iop:” by pressing **[6]** button on the remote commander.
4. Wait until a hexadecimal number appears in the on-screen display as below:

#### Manual Adjust

1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eg Boost Adjust:
6. Iop. ED:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:

**[↑↓]** Change Value

**[RETURN]** Return to previous menu

5. Convert data from hexadecimal to decimal by using conversion table.
6. Press **[RETURN]** button on the remote commander to return to previous menu.
7. Press **[0]** button on the remote commander to return to the Top Menu of Remocon Diagnosis Menu.
8. Press **[I/O]** button to turn off the system.

### • Check Emergency History

To check the emergency history, please follow the following procedure.

1. From the Top Menu of Remocon Diagnosis Menu, select “3. Emergency History” by pressing the **[3]** button on the remote commander. The following screen appears on the on-screen display.

#### Emg.History Check

Laser Hours	CD	999h	59min
	DVD	999h	59min

1. 01 05 04 04	00 92 46 00
00 00 00 00	00 00 23 45
2. 02 02 01 01	00 A9 4B 00
00 00 00 00	00 00 23 45

**[Next]** Next Page **[Prev]** Prev Page

**[0]** Return to Top Menu

2. You can check the total time when the laser is turned on during playback of DVD and CD from the above menu. The maximum time, which can be displayed are 999h 59min.
3. You can check the error code of latest 10 emergency history from the above menu. To view the previous or next page of emergency history, press **[◀]** or **[▶]** on the remote commander. The error code consists of

- Error Code

Example of Error code									
1.	01	05	04	04	00	92	46	00	
	00	00	00	00	00	00	23	45	

The meaning of error code is as below:

01: Communication error (No reply from syscon)

02: Syscon hung up

03: Power OFF request when syscon hung up

19: Thermal shutdown

24: MoveSledHome error

25: Mechanical move error (5 Changer)

26: Mechanical move stack error

30: DC motor adjustment error

31: DPD offset adjustment error

32: TE balance adjustment error

33: TE sensor adjustment error

34: TE loop gain adjustment error

35: FE loop gain adjustment error

36: Bad jitter after adjustment

40: Focus NG

42: Focus layer jump NG

52: Open kick spindle error

51: Spindle stop error

60: Focus on error

61: Seek fail error

62: Read Q data/ID error

70: Lead in data read fail

71: TOC read time out (CD)

80: Can't buffering

81: Unknown media type

- Parameter of error code

This is the detail of error code.

Example of Error code									
1.	01	05	04	04	00	92	46	00	
	00	00	00	00	00	00	23	45	

- Time of error code

This is the laser time when an error occurred.

Example of Error code									
1.	01	05	04	04	00	92	46	00	
	00	00	00	00	00	00	23	45	

### To clear the Laser Hour

Press **[DISPLAY]** button and then press **[CLEAR]** button. The data for both CD and DVD data are reset.

Emg.History Check				
Laser Hours	CD	0h	0min	
	DVD	0h	0min	
1. 01 05 04 04	00 92 46 00			
00 00 00 00	00 00 23 45			
<b>[Next]</b>	<b>Next Page</b>	<b>[Prev]</b>	<b>Prev Page</b>	
<b>[0]</b> Return to Top Menu				

### To clear the Emergency History

Press **[MENU]** button and then press **[CLEAR]** button. The error code for all emergency history would be reset.

Emg.History Check				
Laser Hours	CD	999h	59min	
	DVD	999h	59min	
1. 00 00 00 00	00 00 00 00			
00 00 00 00	00 00 00 00			
2. 00 00 00 00	00 00 00 00			
00 00 00 00	00 00 00 00			
<b>[Next]</b>	<b>Next Page</b>	<b>[Prev]</b>	<b>Prev Page</b>	
<b>[0]</b> Return to Top Menu				

### To return to the Top Menu of Remocon Diagnosis Menu

Press **[0]** button on the remote commander.

- Check Version Information

To check the version information, please follow the following procedure.

1. From the Top Menu of Remocon Diagnosis Menu, select “4. Version Information” by pressing the **[4]** button on the remote commander. The following screen appears on the on-screen display.

Version information				
Firm (Main) :	Ver. xxxxx			
Firm (Sub) :	xxxxxx			
RISC :	xxxxxx			
8032 :	xxxxxx			
Audio DSP :	xxxxxx			
Servo DSP :	xxxxxx			
<b>[0]</b> Return to Top Menu				

To return to the Top Menu of Remocon Diagnosis Menu, press **[0]** on the remote commander.

## SECTION 4

### MECHANICAL ADJUSTMENTS

**Precaution**

1. Clean the following parts with a denatured alcohol-moistened swab:
 

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idle
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

**Torque Measurement**

Mode	Torque meter	Meter reading
FWD	CQ-102C	3.06 N • m to 6.96 N • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	0.19 N • m to 0.58 N • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	3.06 N • m to 6.96 N • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	0.19 N • m to 0.58 N • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	6.96 N • m to 14.02 N • m 71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	9.80 N • m 100 g or more (3.53 oz or more)
REV tension	CQ-403R	9.80 N • m 100 g or more (3.53 oz or more)

## SECTION 5 ELECTRICAL ADJUSTMENTS

### DVD SECTION

When the base unit is replaced, perform the adjustment and the measurement as shown below in this order.

- 1) MIRROR TIME ADJUSTMENT (See page 22)
- 2) EXECUTING IOP MEASUREMENT (See page 24)

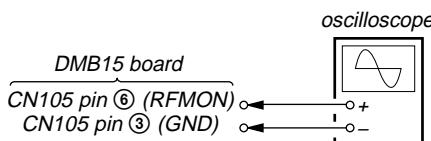
#### [TEST DISC LIST]

Be sure to use the DVD disc that matches the signal standards of your region.

- CD
  - YEDS-18 (Part No.: 3-702-101-01)
  - PATD-012 (Part No.: 4-225-203-01)
- DVD SL (Single Layer)
  - NTSC : HLX-503 (Part No.: J-6090-069-A)
  - HLX-504 (Part No.: J-6090-088-A)
  - PAL : HLX-506 (Part No.: J-6090-077-A)
- DVD DL (Dual Layer)
  - NTSC : HLX-501 (Part No.: J-6090-071-A)
  - HLX-505 (Part No.: J-6090-089-A)
  - PAL : HLX-507 (Part No.: J-6090-078-A)

#### [RFMON Level Check]

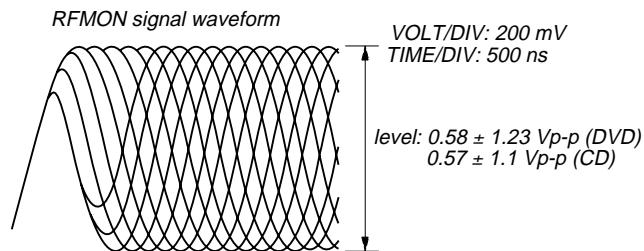
Connection:



#### Procedure:

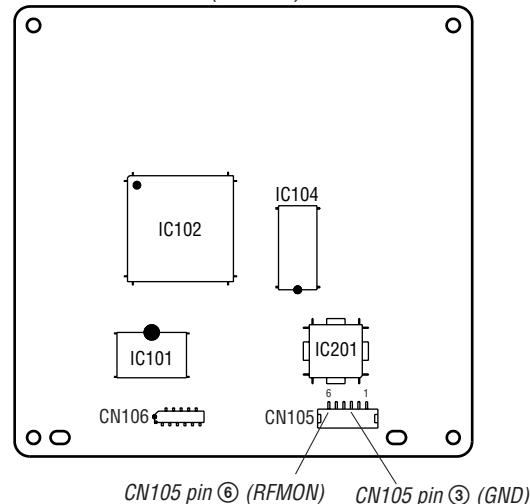
1. Connect an oscilloscope to CN105 pin ⑥ (RFMON) and CN105 pin ③ (GND) on the DMB15 board.
2. Turn the power on.
3. Set the test disc (refer to the TEST DISC LIST) on the tray and press button to playback.
4. Confirm that oscilloscope waveform is clear and check RFMON signal level is correct or not.

**Note:** A clear RFMON signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.



Checking Location: DMB15 board (Side A)

#### 【DMB15 BOARD】(SIDE A)

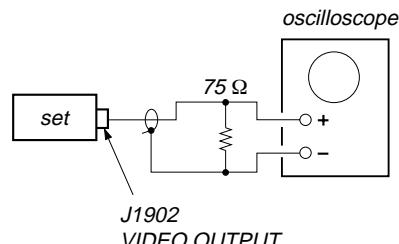


### VIDEO SECTION

#### Video Level Check (VIDEO BOARD)

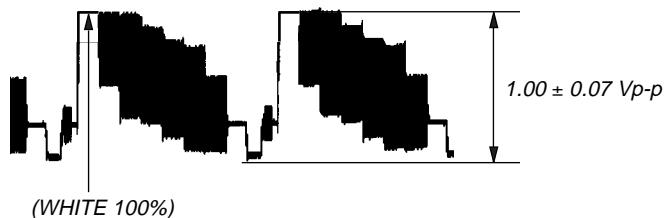
##### Purpose

This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.



#### Procedure:

1. Connect oscilloscope to VIDEO output.
2. Load a DVD reference disc playback.
3. Check the video signal level is  $1.00 \pm 0.07 \text{Vp-p}$ .



**DECK SECTION**

0 dB=0.775 V

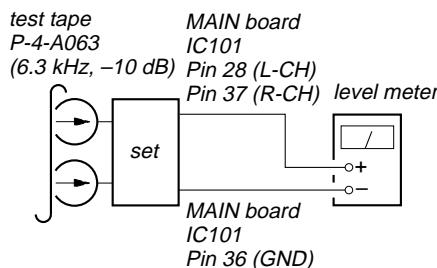
1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

## • Test Tape

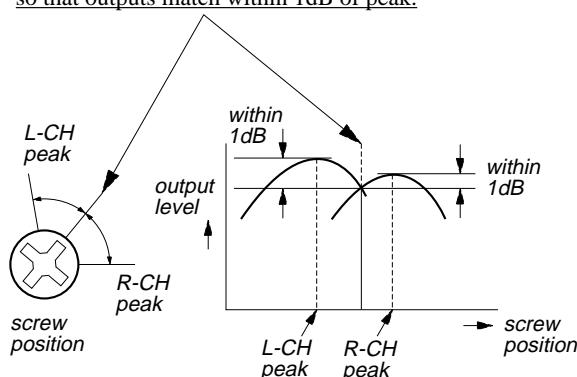
Tape	Signal	Used for
P-4-A063	6.3 kHz, -10 dB	Azimuth Adjustment

**Record/Playback Head Azimuth Adjustment****DECK A****DECK B****Note:** Perform this adjustments for both decks**Procedure:**

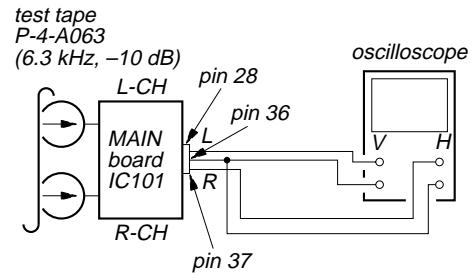
1. Mode: Playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



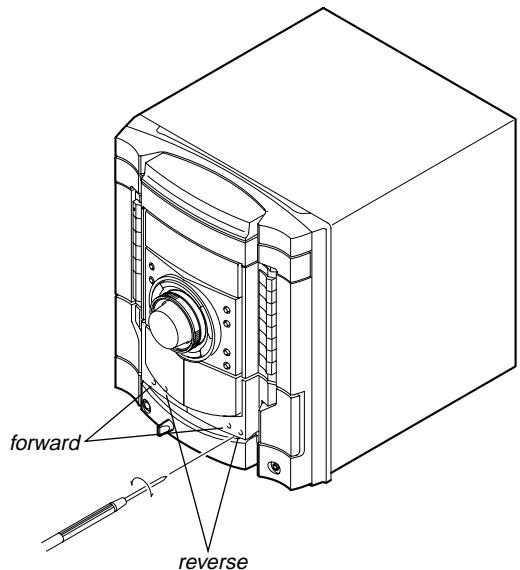
3. Mode: Playback



4. After the adjustments, apply suitable locking compound to the parts adjusted.

**Adjustment Location:** Playback Head (Deck A).

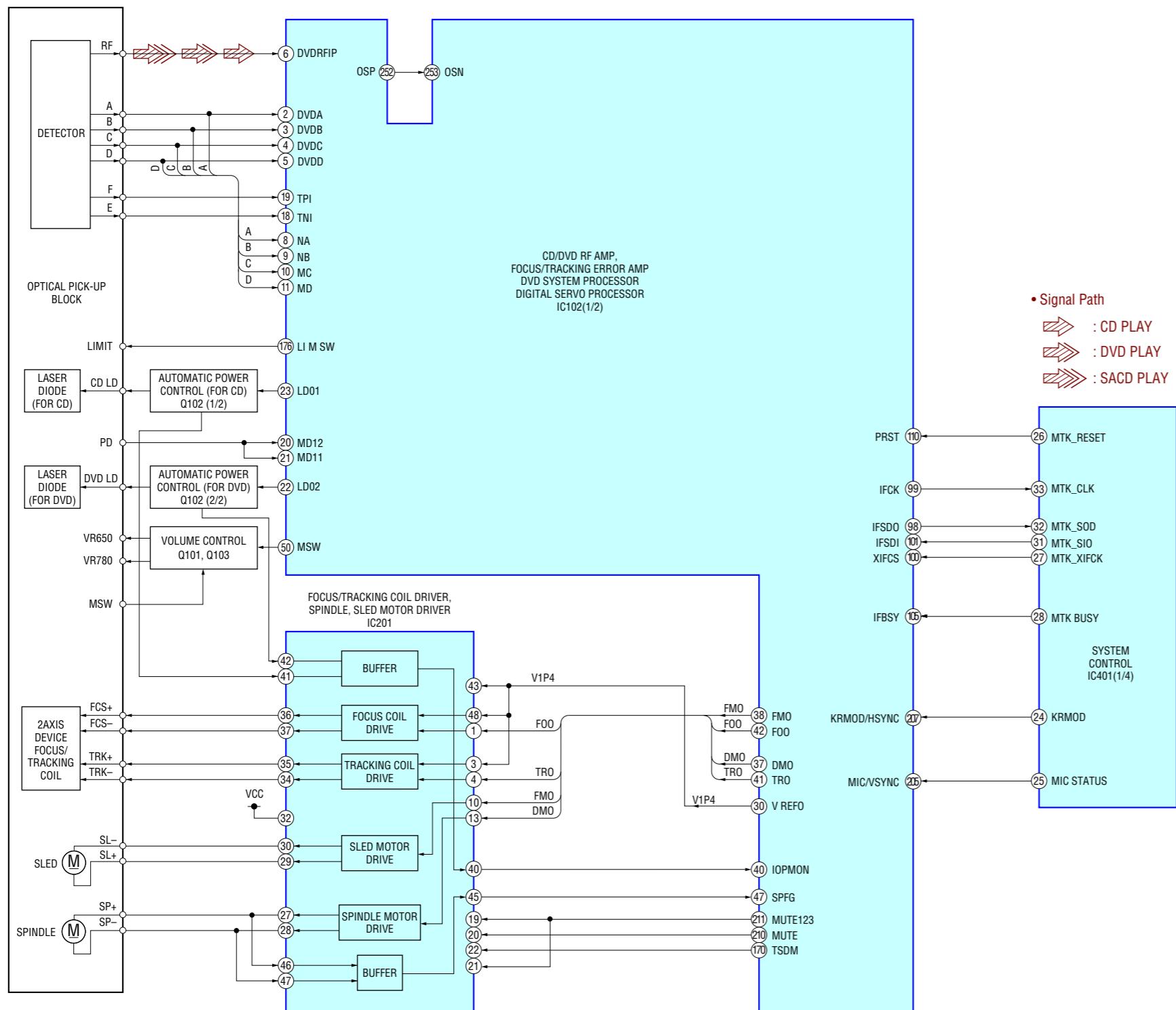
Record/Playback/Erase Head (Deck B).



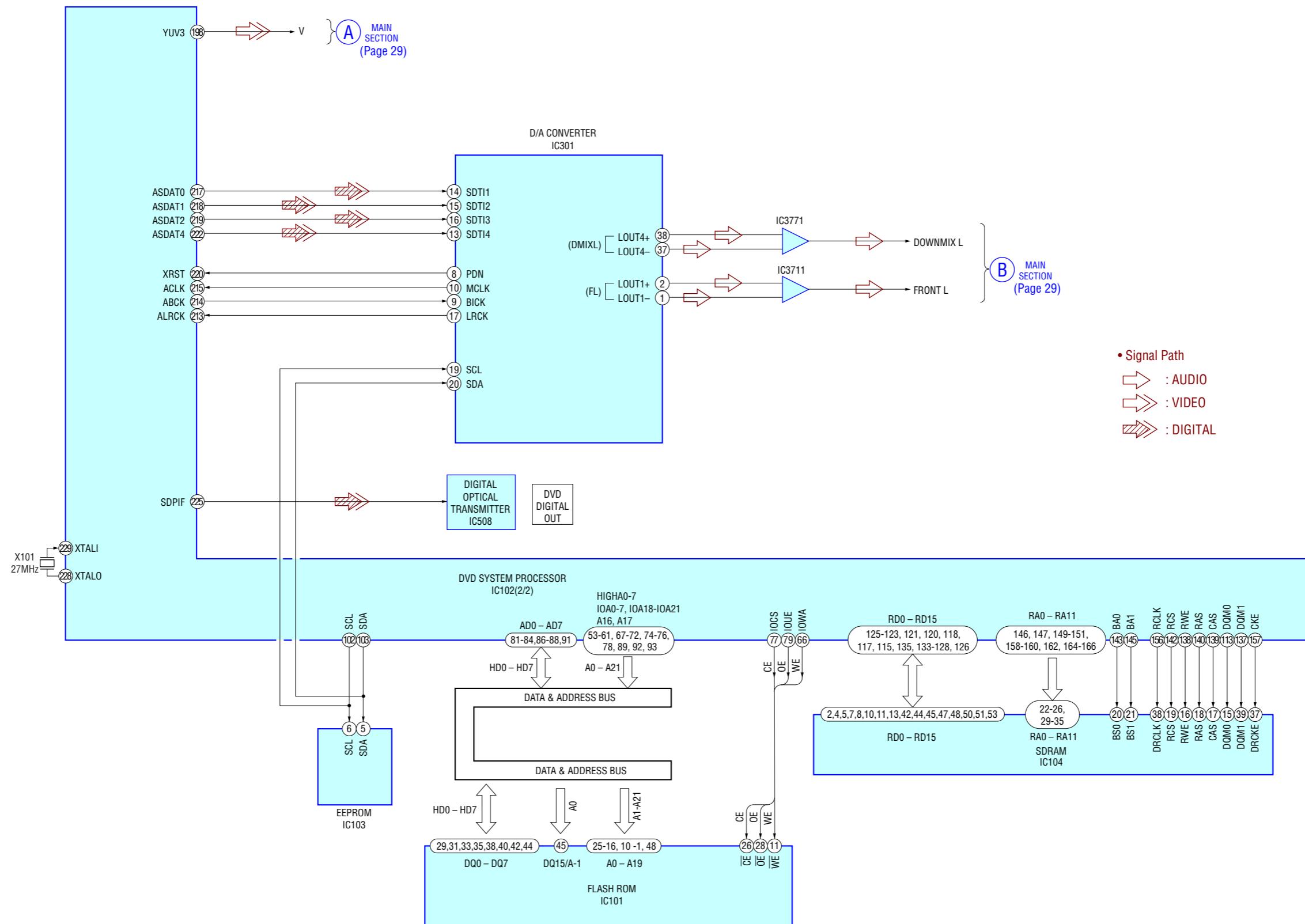
MEMO

## **SECTION 6 DIAGRAMS**

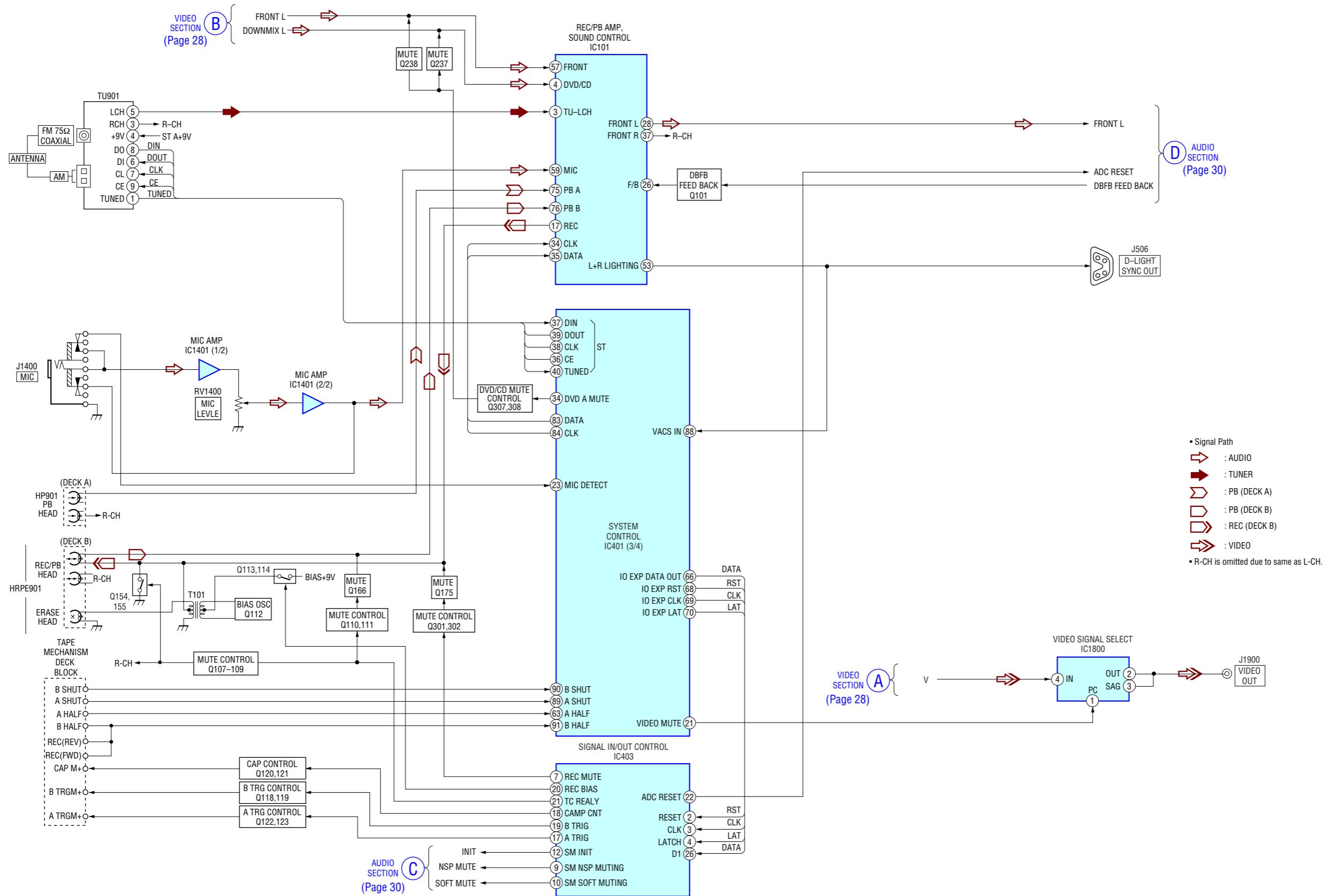
## **6-1. BLOCK DIAGRAM — RF/SERVO SECTION —**



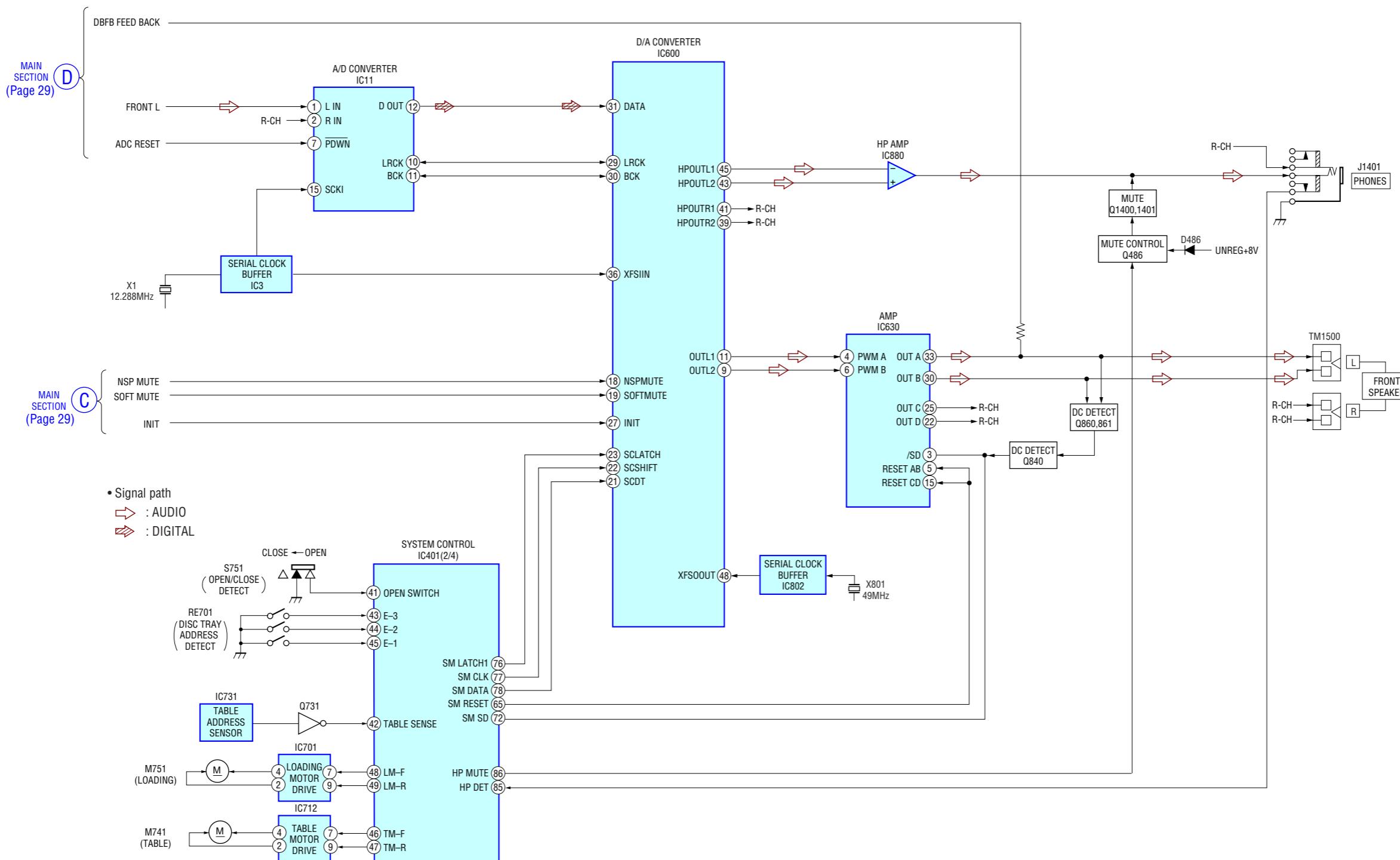
## 6-2. BLOCK DIAGRAM — VIDEO SECTION —



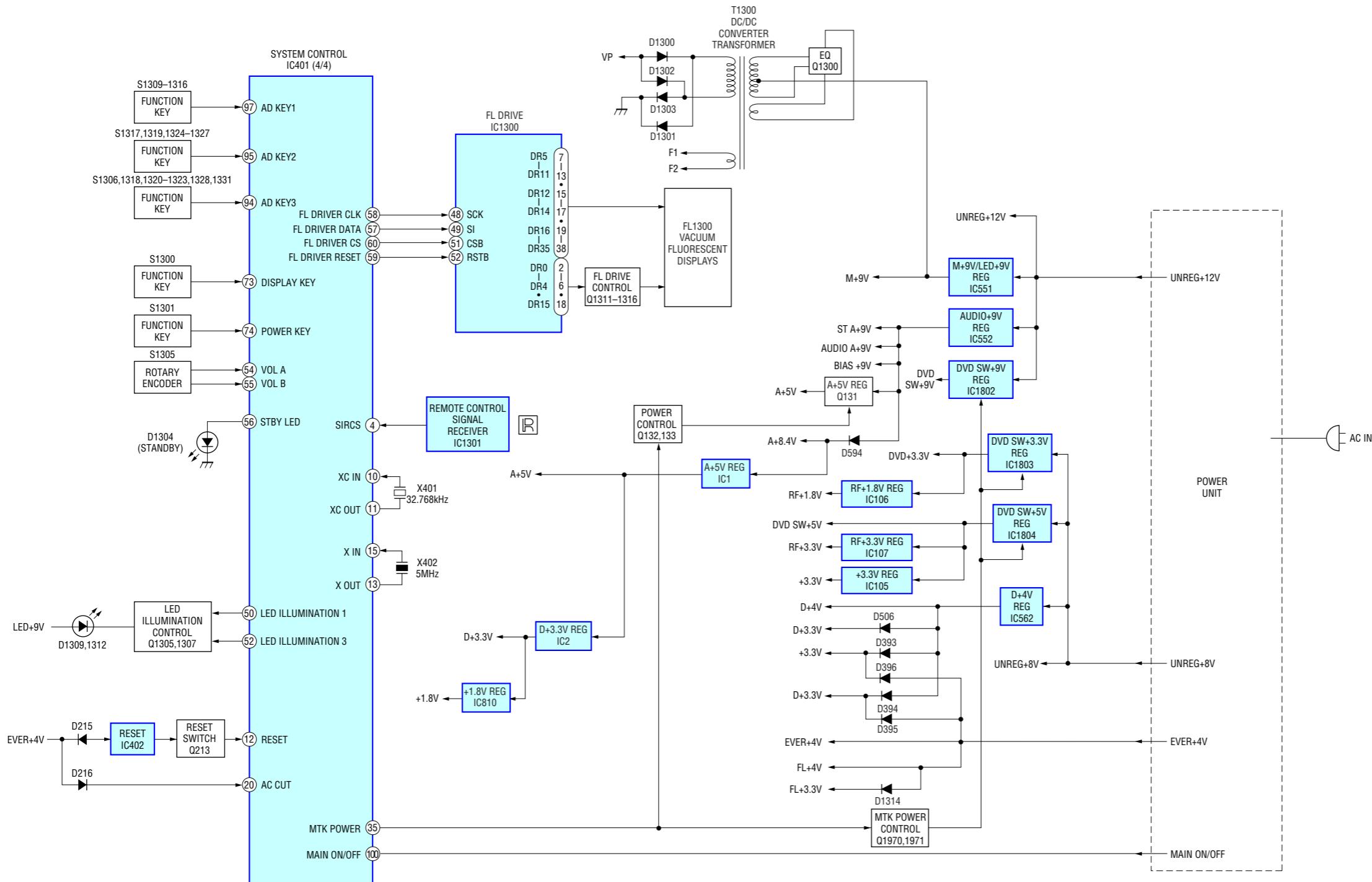
### **6-3. BLOCK DIAGRAM — MAIN SECTION —**



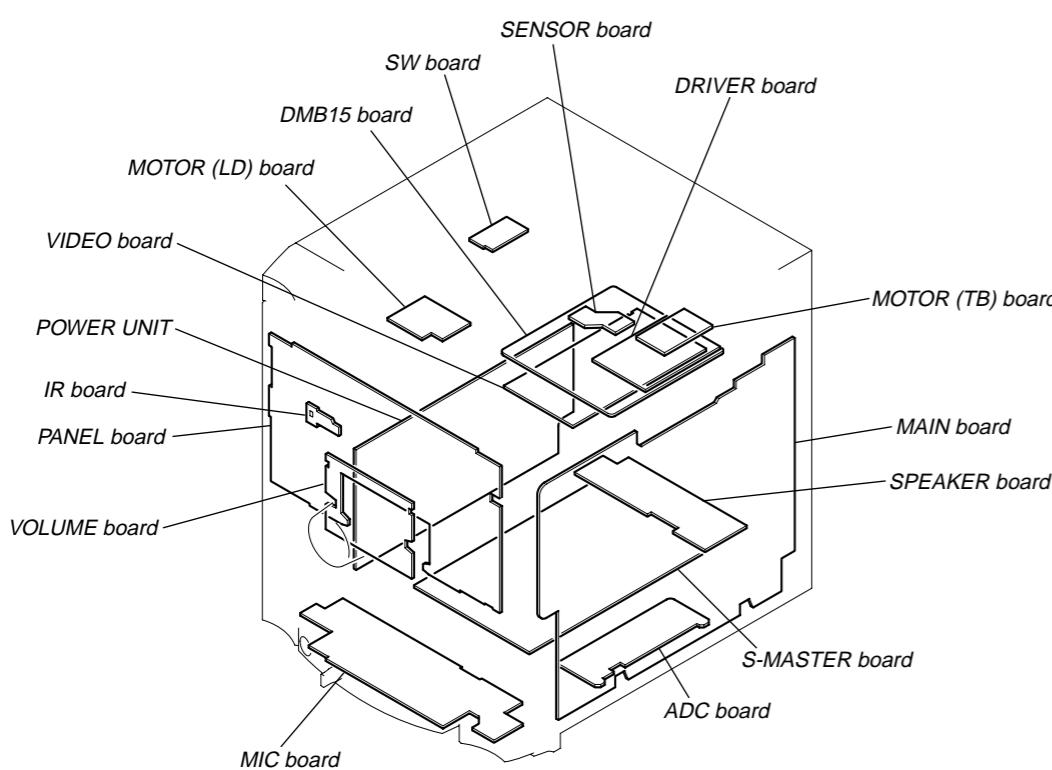
## 6-4. BLOCK DIAGRAM — AUDIO SECTION —



## 6-5. BLOCK DIAGRAM — FUNCTION/POWER SECTION —



## 6-6. CIRCUIT BOARDS LOCATION



## • Note For Printed Wiring Boards And Schematic Diagrams

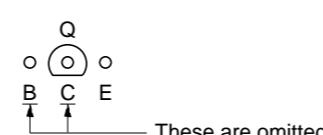
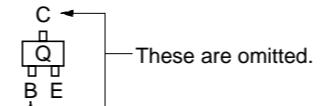
## Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Pattern from the side which enables seeing.  
(The other layer's patterns are not indicated.)

## Caution:

Pattern face side: Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.  
Parts face side: Parts on the parts face side seen from (Component Side) the parts face are indicated.

- Indication of transistor.



## UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

**LF : LEAD FREE MARK**

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.  
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.  
Soldering irons using a temperature regulator should be set to about 350 °C.  
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity  
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder  
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

## Note on Schematic Diagram:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p:  $\text{pF}$ )  
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- : nonflammable resistor.
- : panel designation.

**Note:** The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

- : B+ Line.
- : B- Line.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : FM
- \* : Impossible to measure

• Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.

• Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.

- Circled numbers refer to waveforms.

## • Signal path.

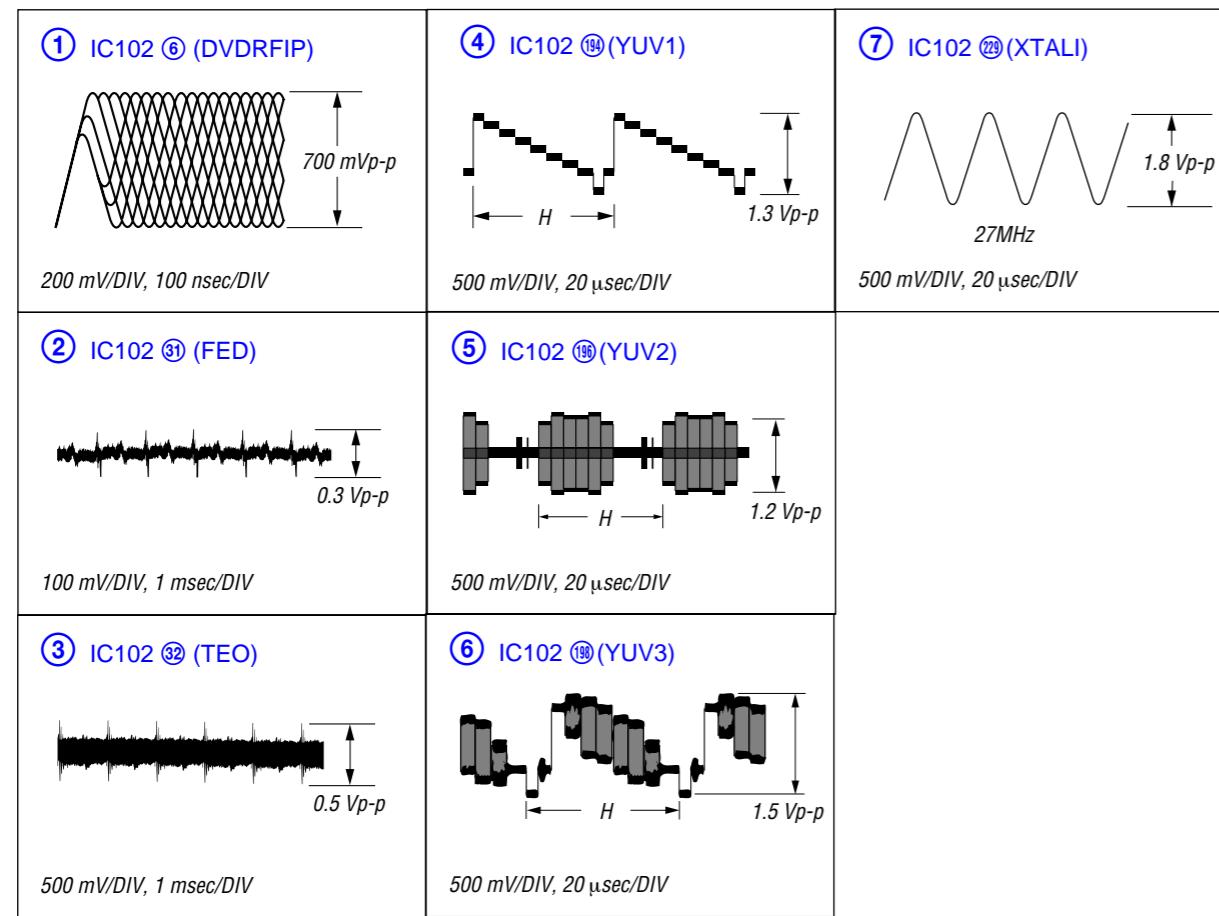
- ▷ : AUDIO
- : TUNER
- ▷▷ : VIDEO (COMPONENT)
- ▷▷▷ : VIDEO (COMPOSITE)
- ▷▷▷▷ : TAPE PLAY (DECK A)
- ▷▷▷▷▷ : TAPE PLAY (DECK B)
- ▷▷▷▷▷▷ : TAPE REC (DECK B)
- ▷▷▷▷▷▷▷ : DVD (AUDIO)
- ▷▷▷▷▷▷▷▷ : DVD (RF)
- ▷▷▷▷▷▷▷▷▷ : DVD (DIGITAL)

## • Abbreviation

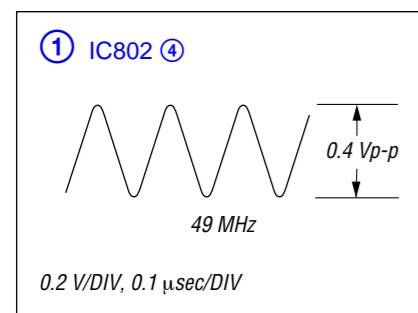
- |     |                                |
|-----|--------------------------------|
| E3  | : 240 V AC area in E model     |
| E12 | : 220-240 V AC area in E model |
| E13 | : 220-230 V AC area in E model |
| E15 | : Iran model                   |
| EA  | : Saudi arabia model           |
| MY  | : Malaysia model               |
| PH  | : Philippine model             |
| SP  | : Singapore model              |
| TH  | : Thai model                   |

• Waveforms

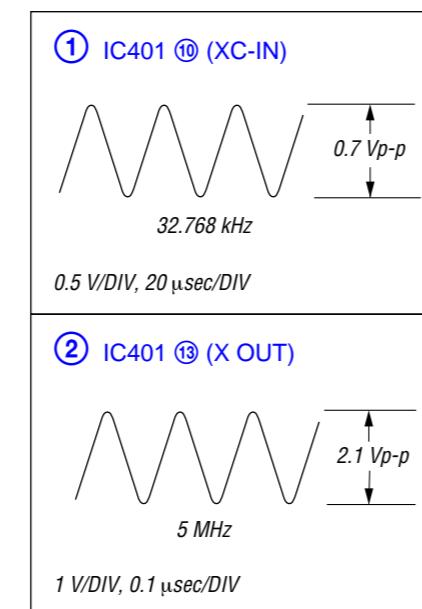
— DMB15 BOARD —



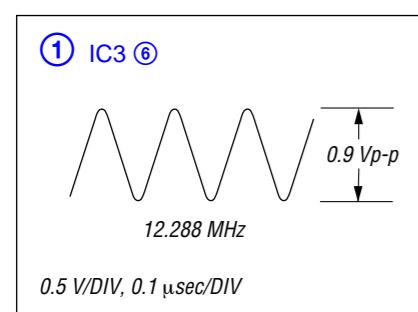
— S-MASTER BOARD —



— MAIN BOARD —



— ADC BOARD —

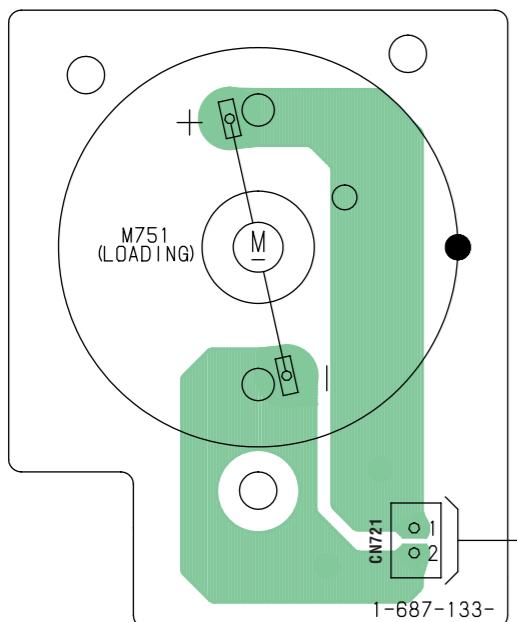


6-7. PRINTED WIRING BOARDS — DRIVER SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

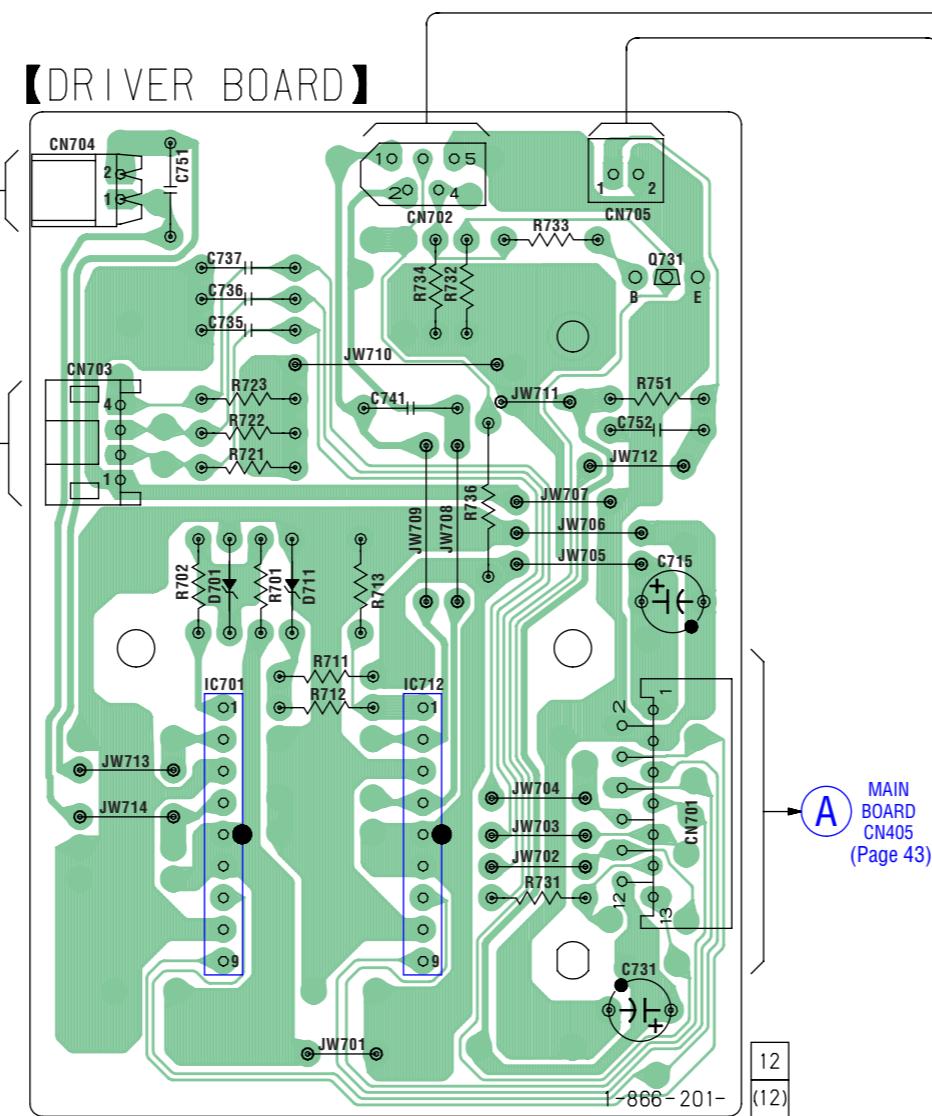
A

【MOTOR (LD) BOARD】



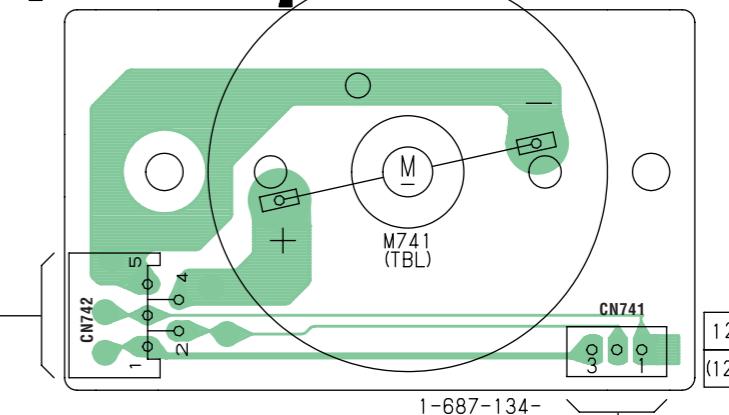
B

【DRIVER BOARD】



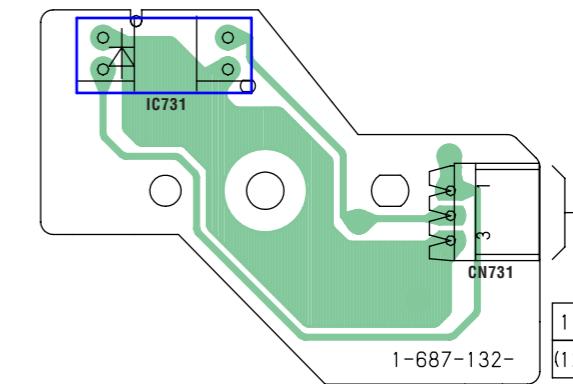
C

【MOTOR (TB) BOARD】



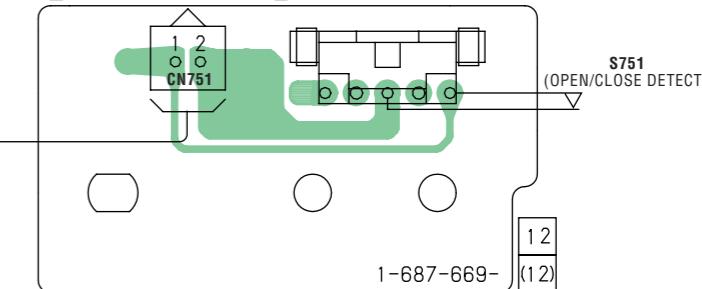
D

【SENSOR BOARD】



E

【SW BOARD】

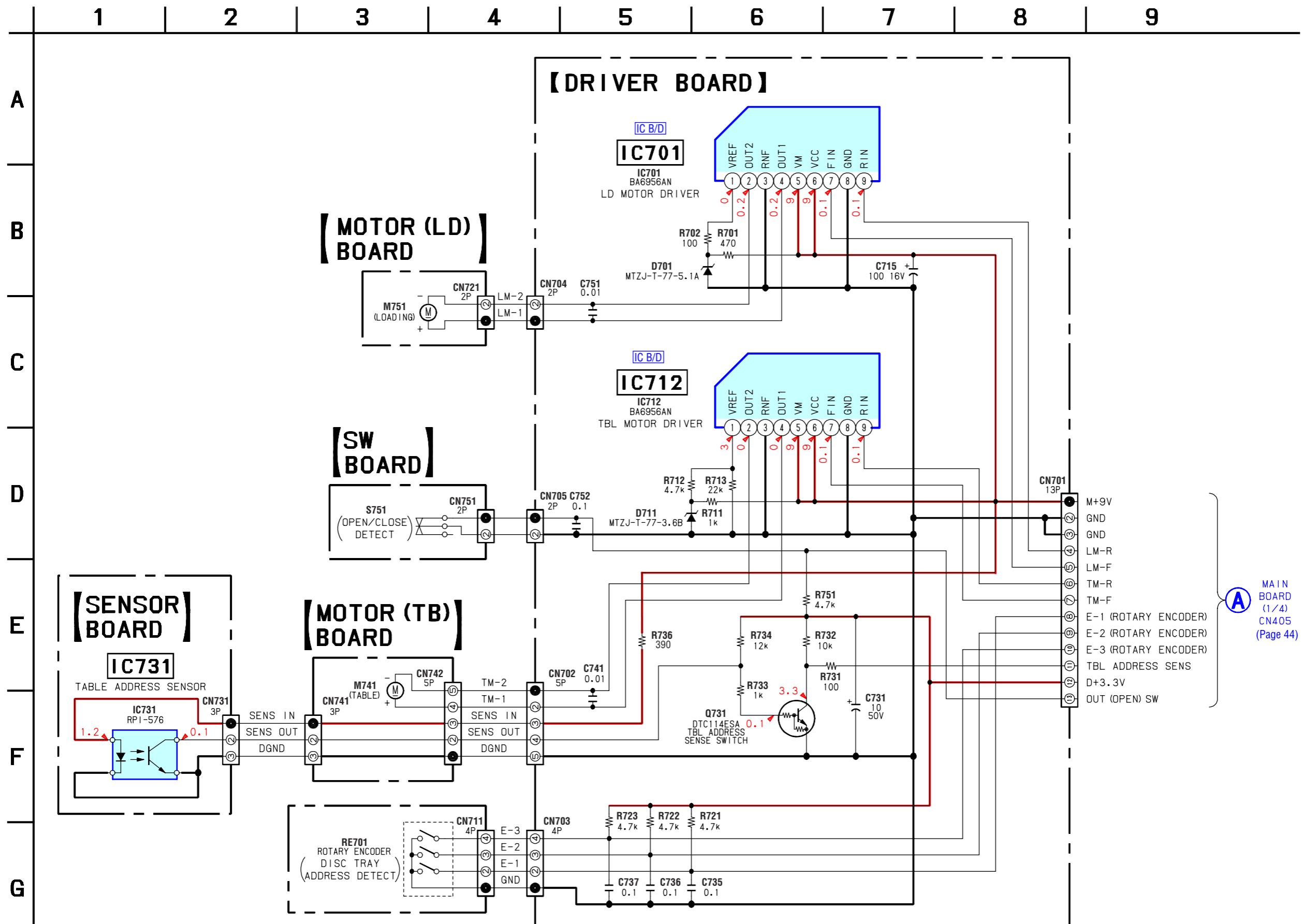


F

## • Semiconductor Location

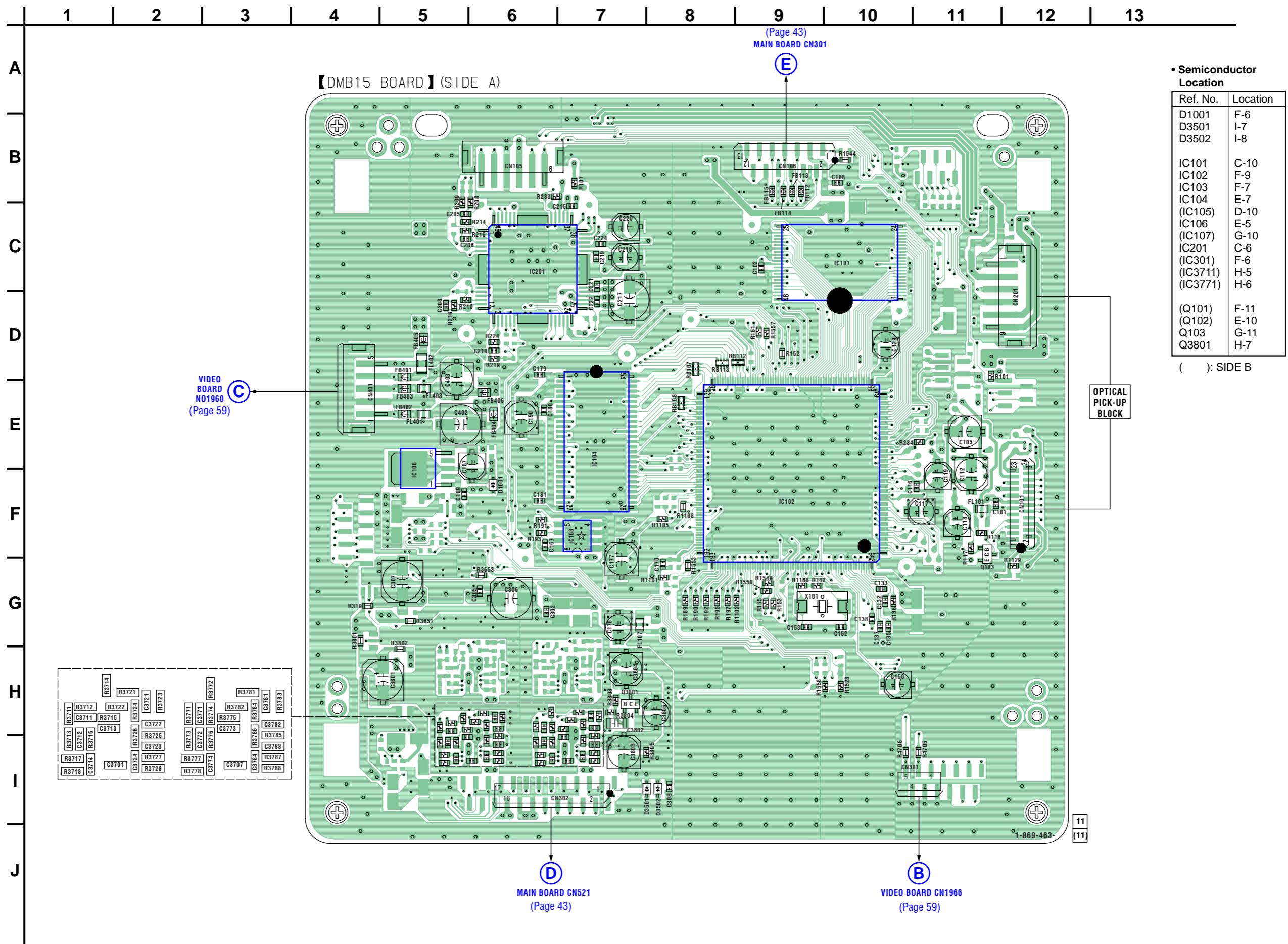
Ref. No.	Location
D701	D-6
D711	D-7
IC701	E-6
IC712	E-7
IC731	E-11
Q731	B-8

## 6-8. SCHEMATIC DIAGRAM — DRIVER SECTION — • Refer to page 63 for IC Block Diagrams.



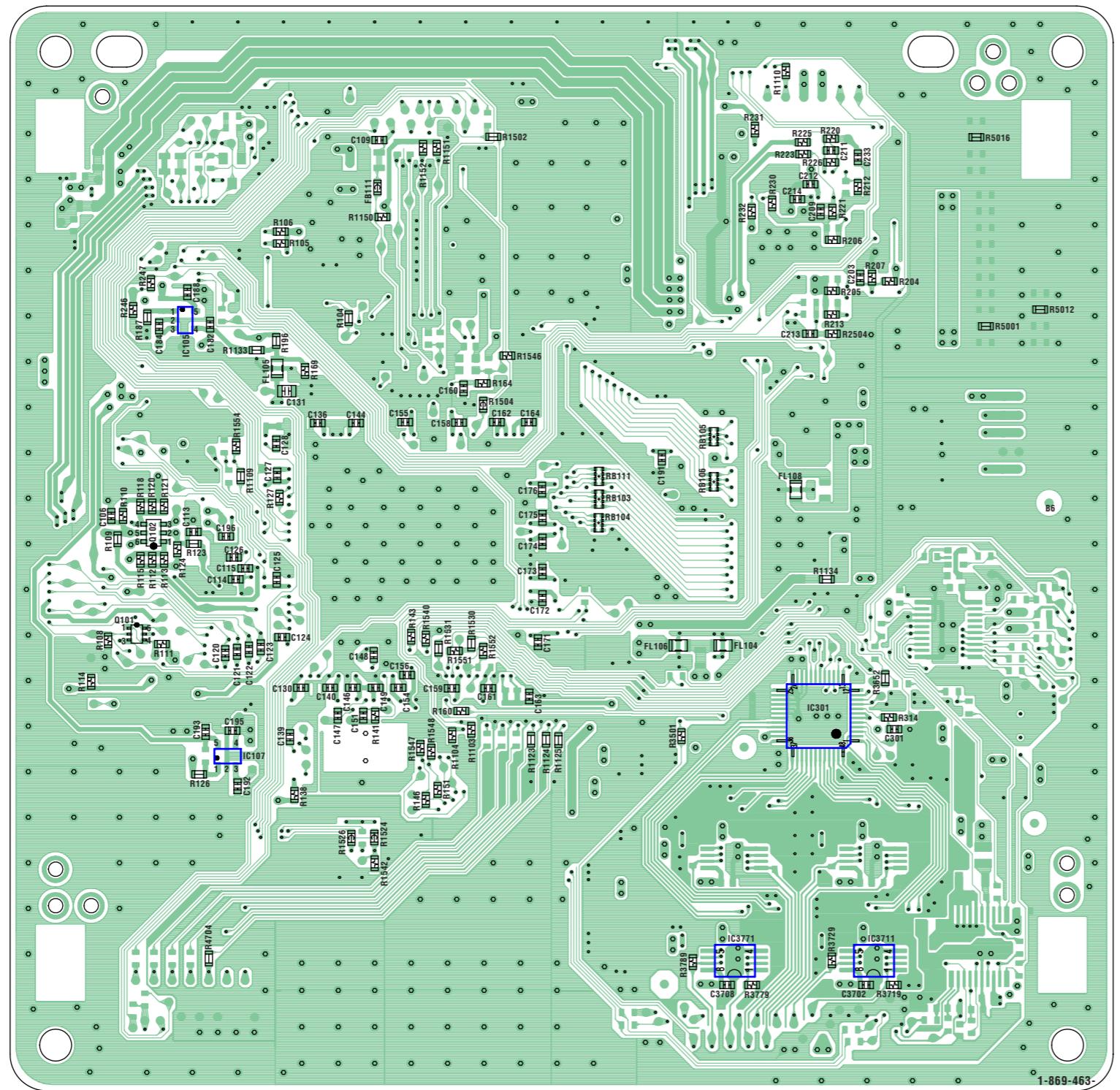
6-9. PRINTED WIRING BOARD — DMB15 SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.

★ New part of EEPROM (IC103) on the DMB15 board cannot be used.  
Therefore, if the mounted DMB15 board (A-1167-778-A, etc.) is replaced,  
exchange new EEPROM (IC103) with that used before the replacement.

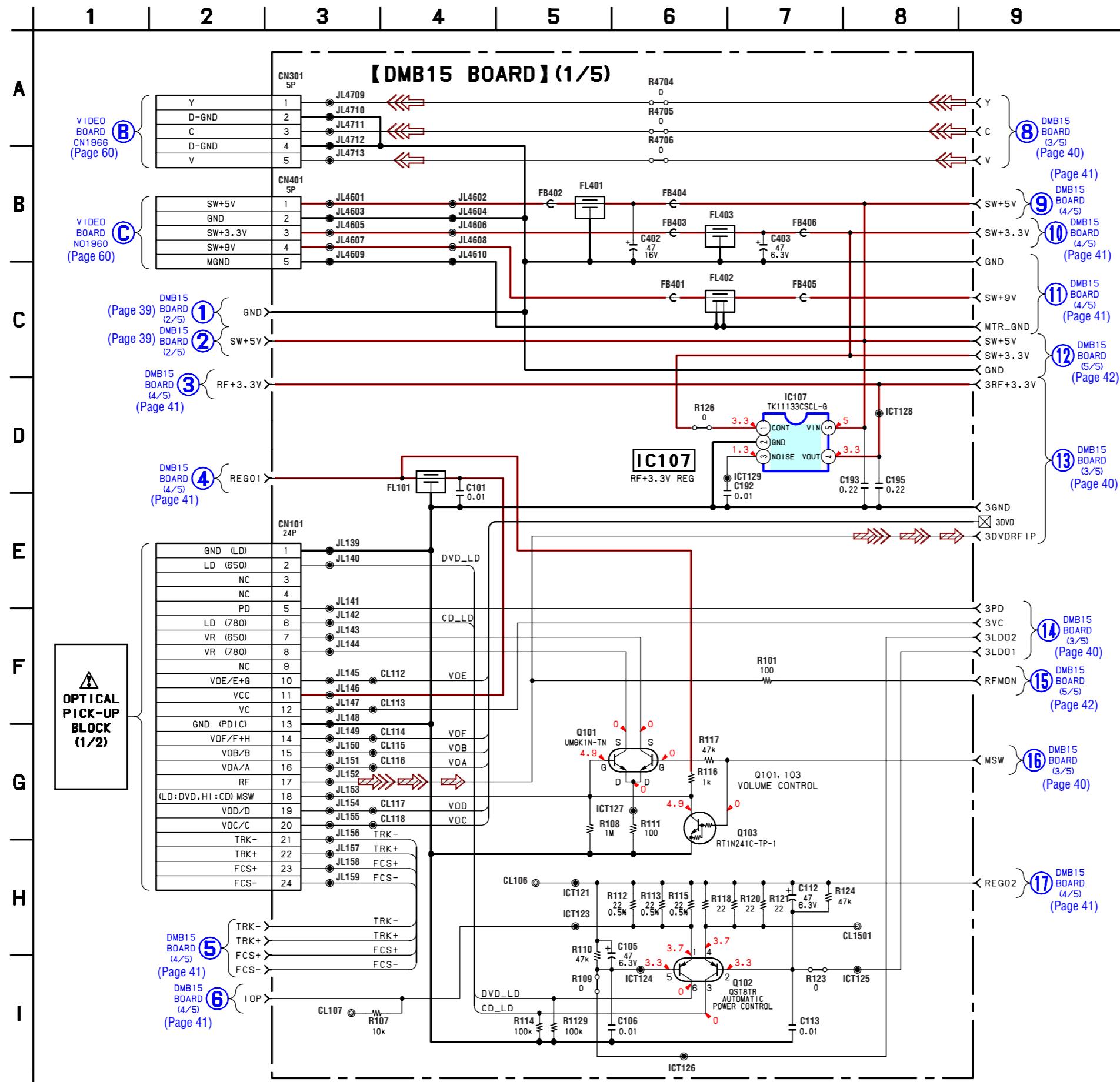


12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

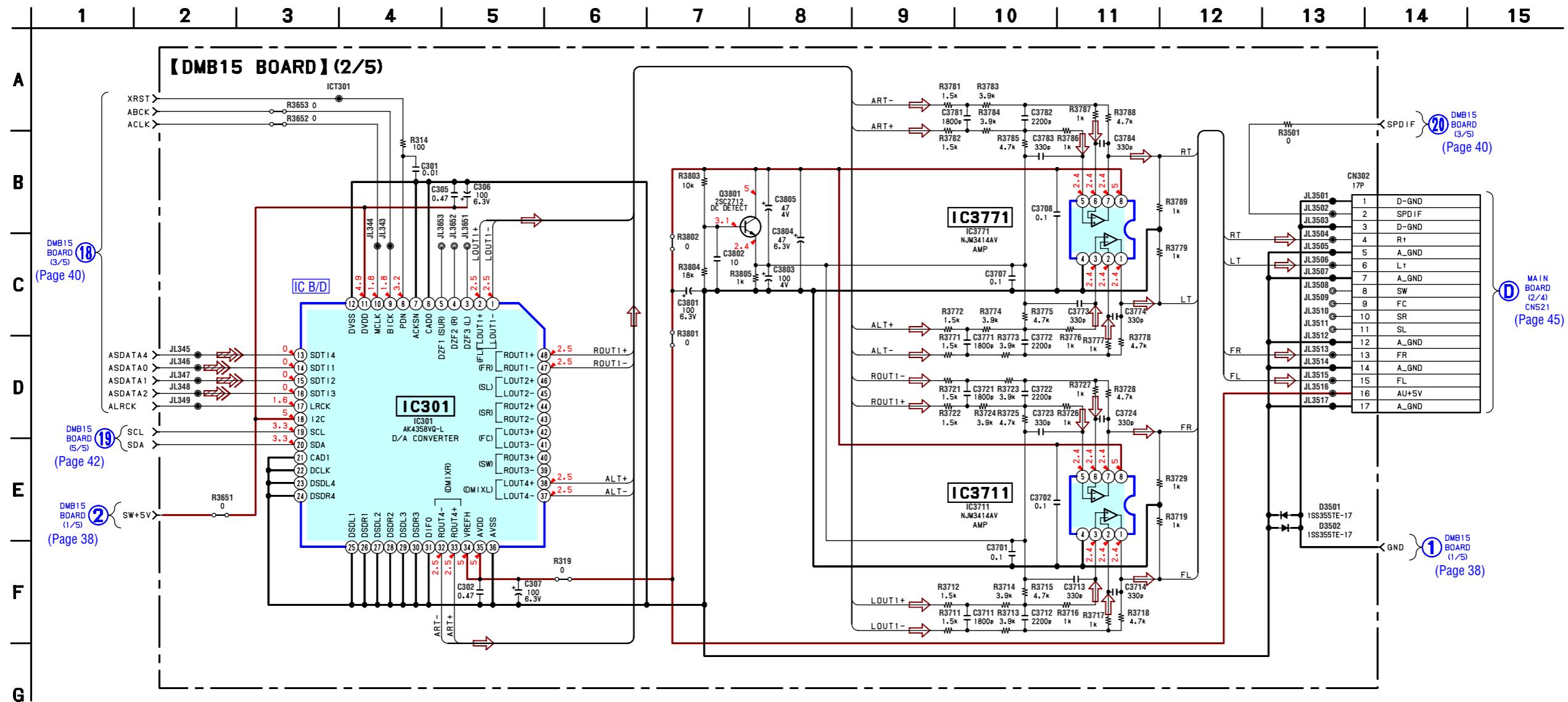
【DMB15 BOARD】(SIDE B)



## **6-10. SCHEMATIC DIAGRAM — DMB15 SECTION (1/5) —**

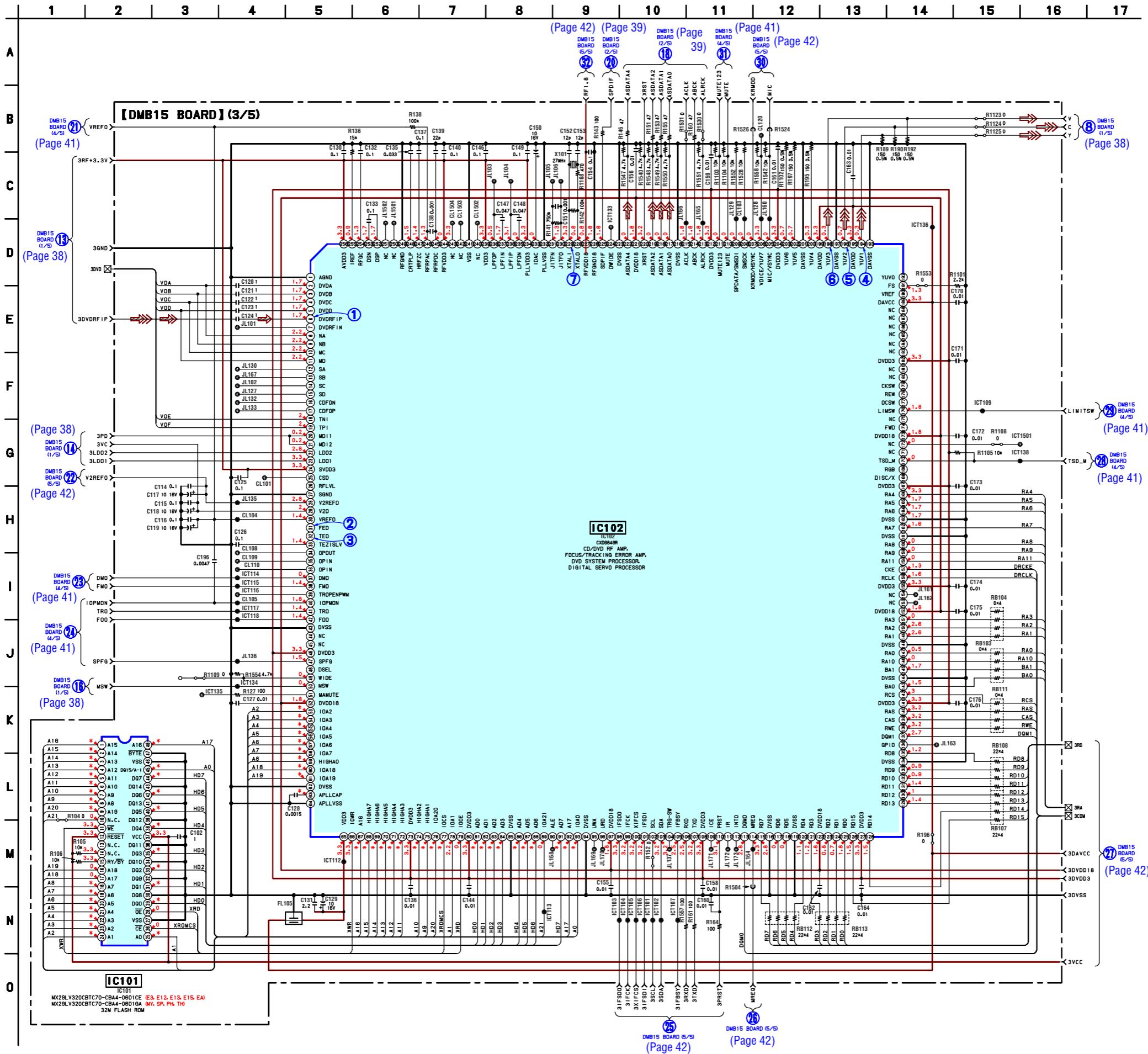


6-11. SCHEMATIC DIAGRAM — DMB15 SECTION (2/5) — • Refer to page 63 for IC Block Diagrams

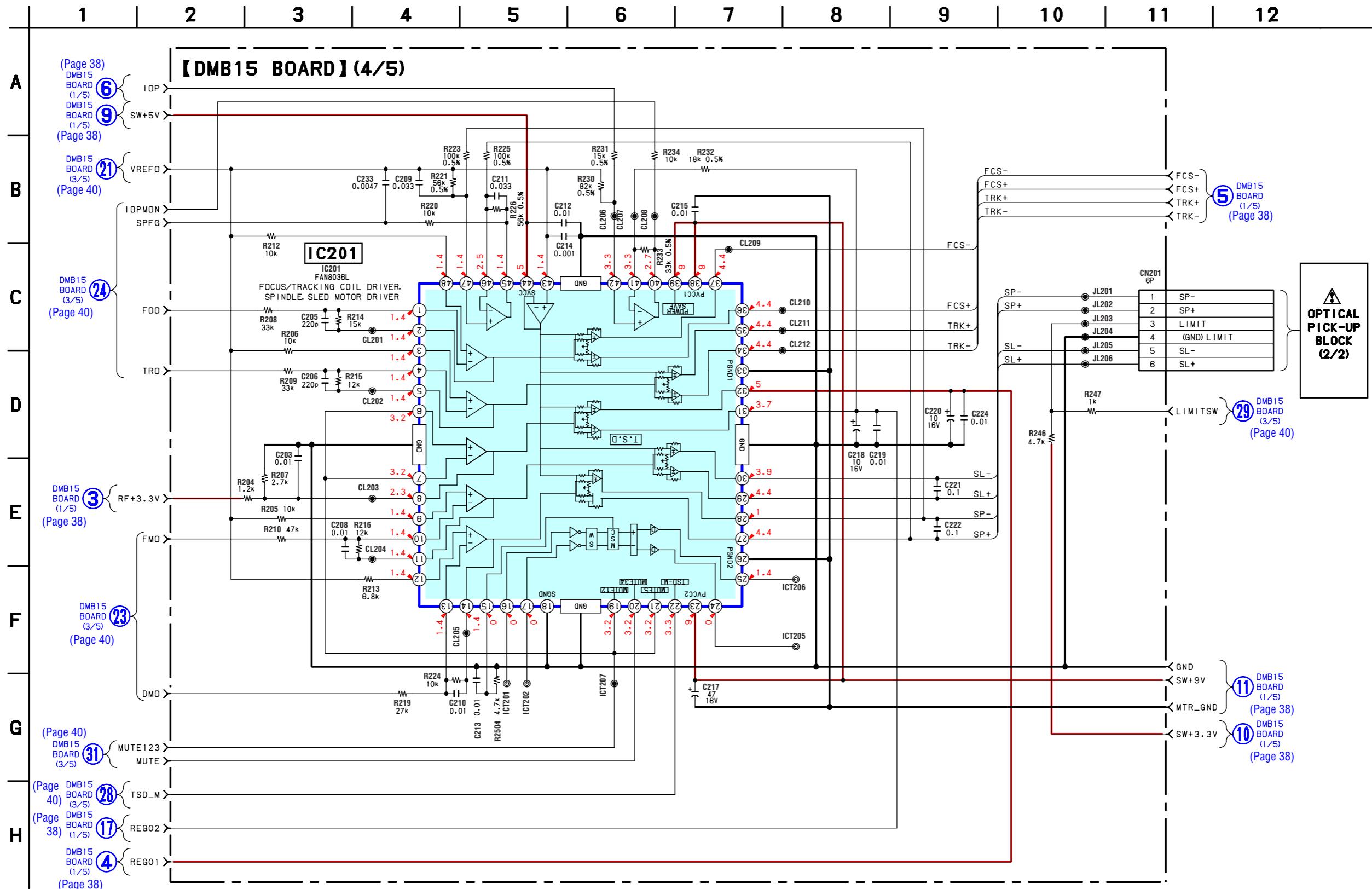


- Refer to page 33 for Waveforms

6-12. SCHEMATIC DIAGRAM — DMB15 SECTION (3/5) — • Refer to page 66 for IC Pin Description of IC102

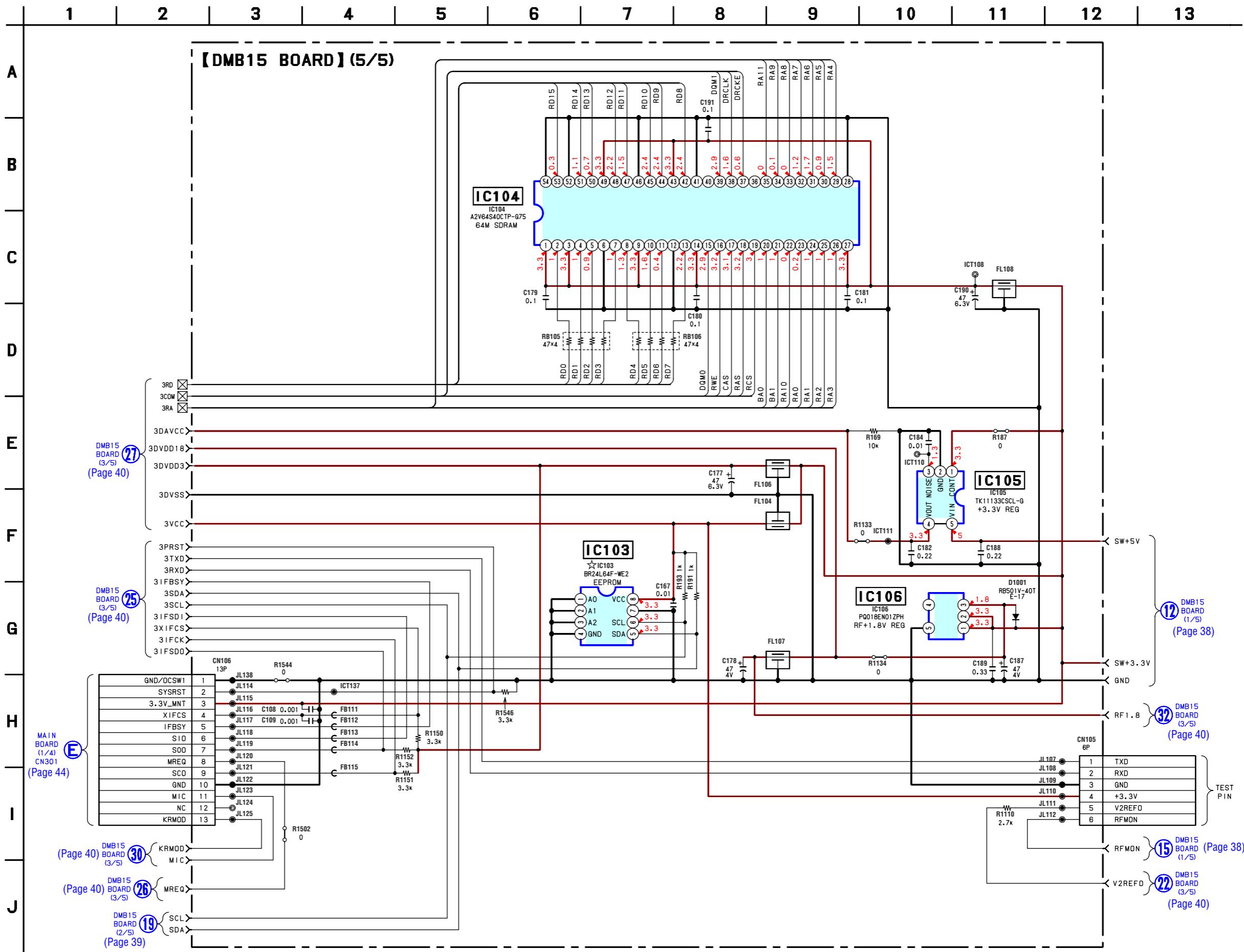


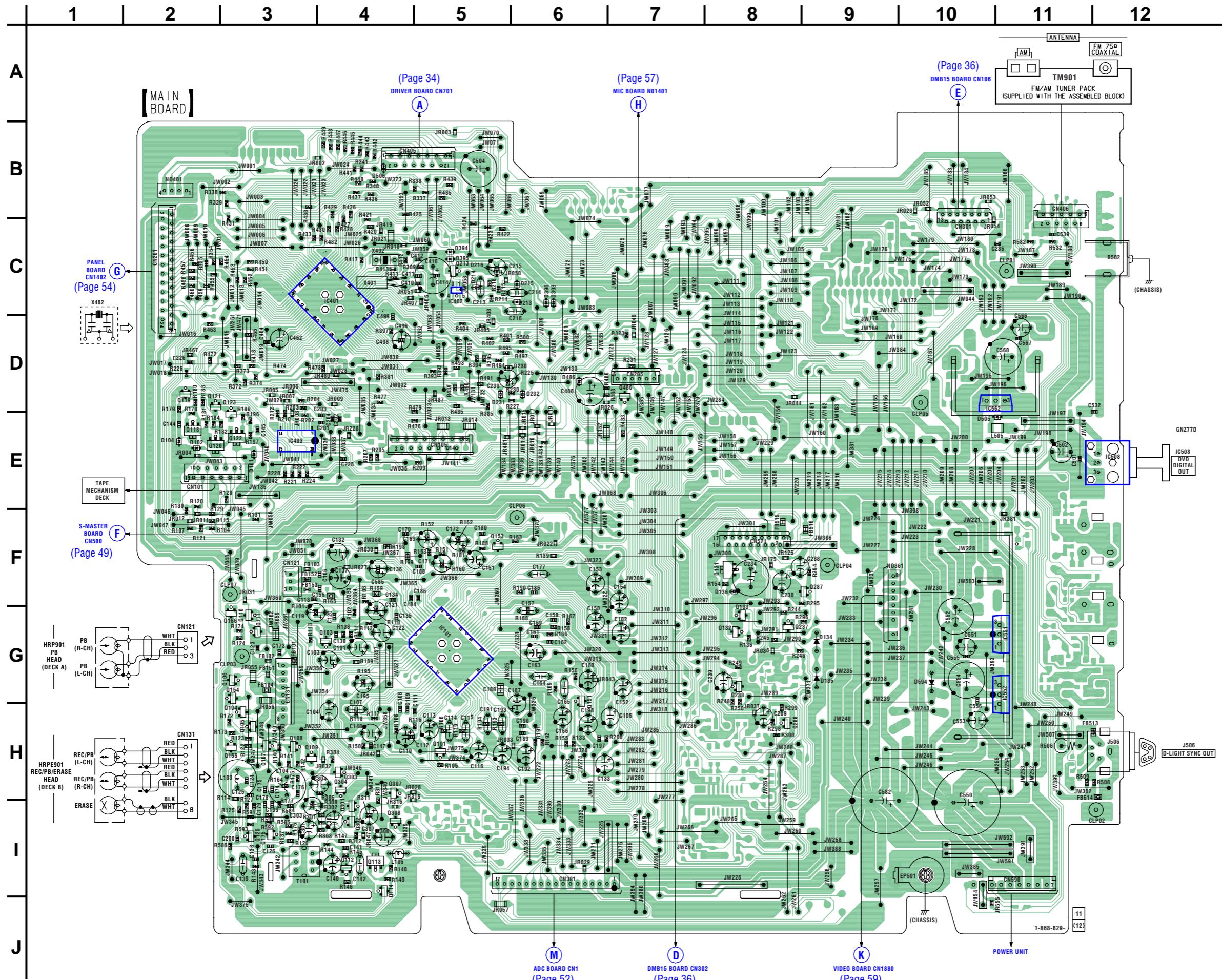
## 6-13. SCHEMATIC DIAGRAM — DMB15 SECTION (4/5) —



6-14. SCHEMATIC DIAGRAM — DMB15 SECTION (5/5) —

★ New part of EEPROM (IC103) on the DMB15 board cannot be used.  
Therefore, if the mounted DMB15 board (A-1167-778-A, etc.) is replaced,  
exchange new EEPROM (IC103) with that used before the replacement.

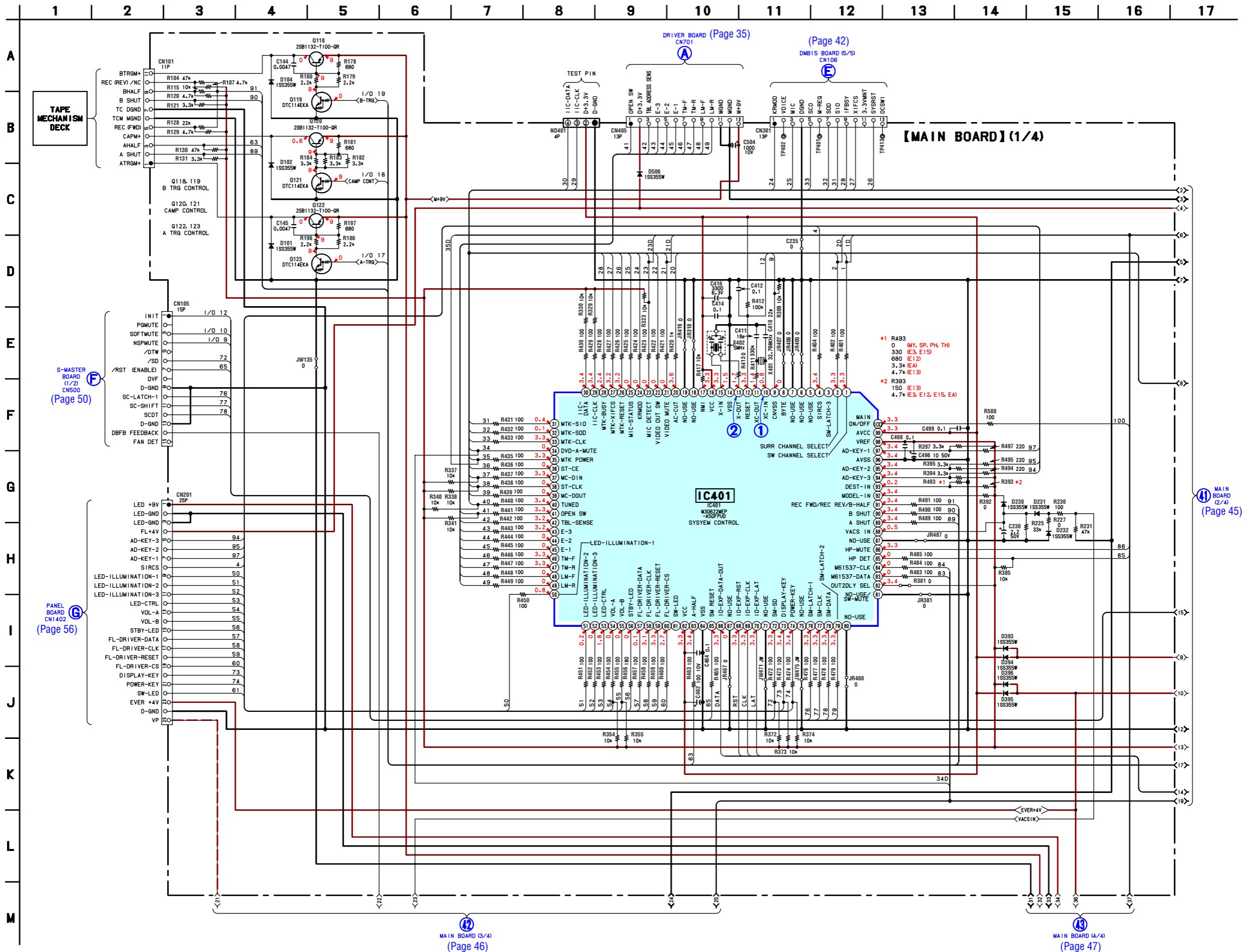


6-15. PRINTED WIRING BOARD — MAIN SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.
**• Semiconductor Location**

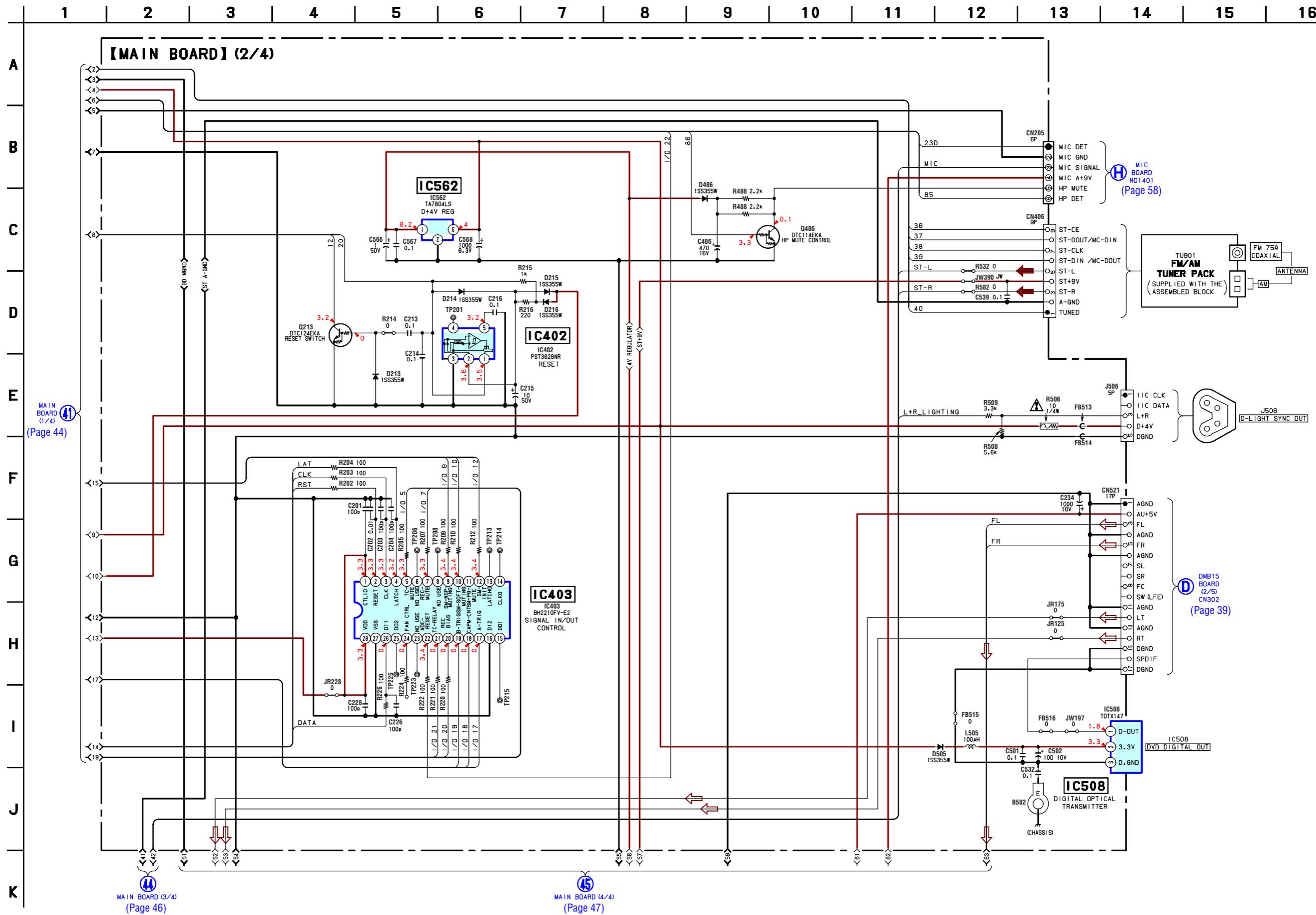
Ref. No.	Location
D101	E-3
D102	E-2
D104	E-2
D134	G-9
D135	G-9
D136	F-8
D213	C-6
D214	C-5
D215	C-6
D216	C-5
D230	D-5
D231	D-5
D232	D-6
D393	C-6
D394	C-5
D395	C-5
D396	C-6
D486	D-6
D505	E-10
D506	B-4
D583	G-11
D594	G-10
IC101	G-5
IC401	C-4
IC402	C-5
IC403	E-3
IC508	E-12
IC551	G-11
IC552	G-11
IC562	D-10
Q101	H-5
Q103	G-4
Q104	H-3
Q105	H-3
Q106	G-3
Q107	H-3
Q108	H-3
Q109	H-3
Q110	G-3
Q111	G-3
Q112	I-4
Q113	I-4
Q114	I-4
Q118	E-2
Q119	D-2
Q120	E-2
Q121	D-2
Q122	E-3
Q123	E-3
Q125	I-3
Q131	F-8
Q132	G-8
Q133	G-8
Q151	G-6
Q153	F-5
Q154	G-3
Q155	H-3
Q166	G-3
Q175	I-3
Q213	C-5
Q237	G-8
Q238	G-8
Q287	F-9
Q288	H-8
Q301	I-4
Q302	I-4
Q303	H-4
Q304	H-4
Q307	H-4
Q308	I-4
Q486	D-7
Q584	G-12

- Refer to page 33 for Waveforms

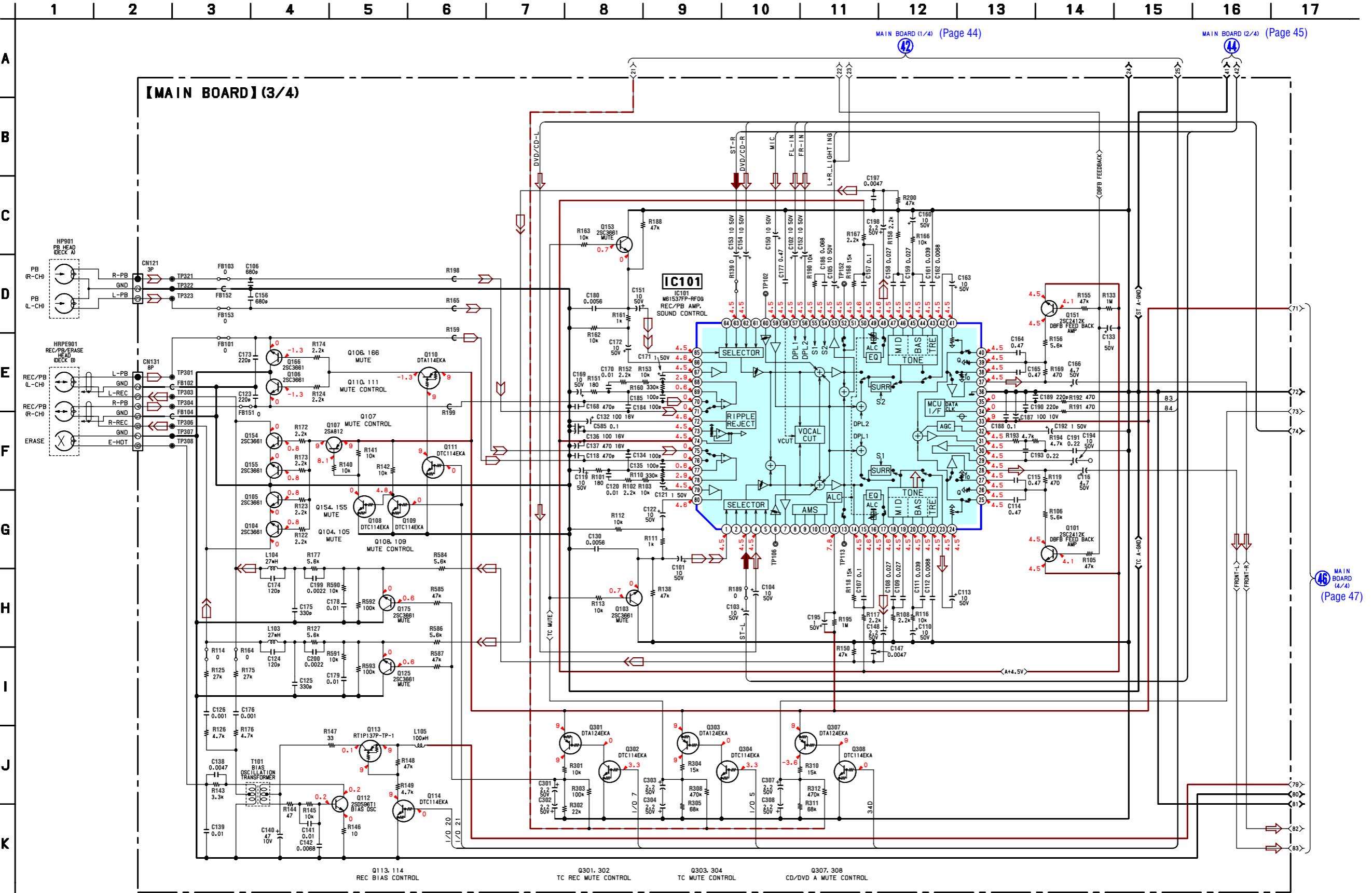
**6-16. SCHEMATIC DIAGRAM — MAIN SECTION (1/4) —** • Refer to page 71 for IC Pin Description of IC4018.



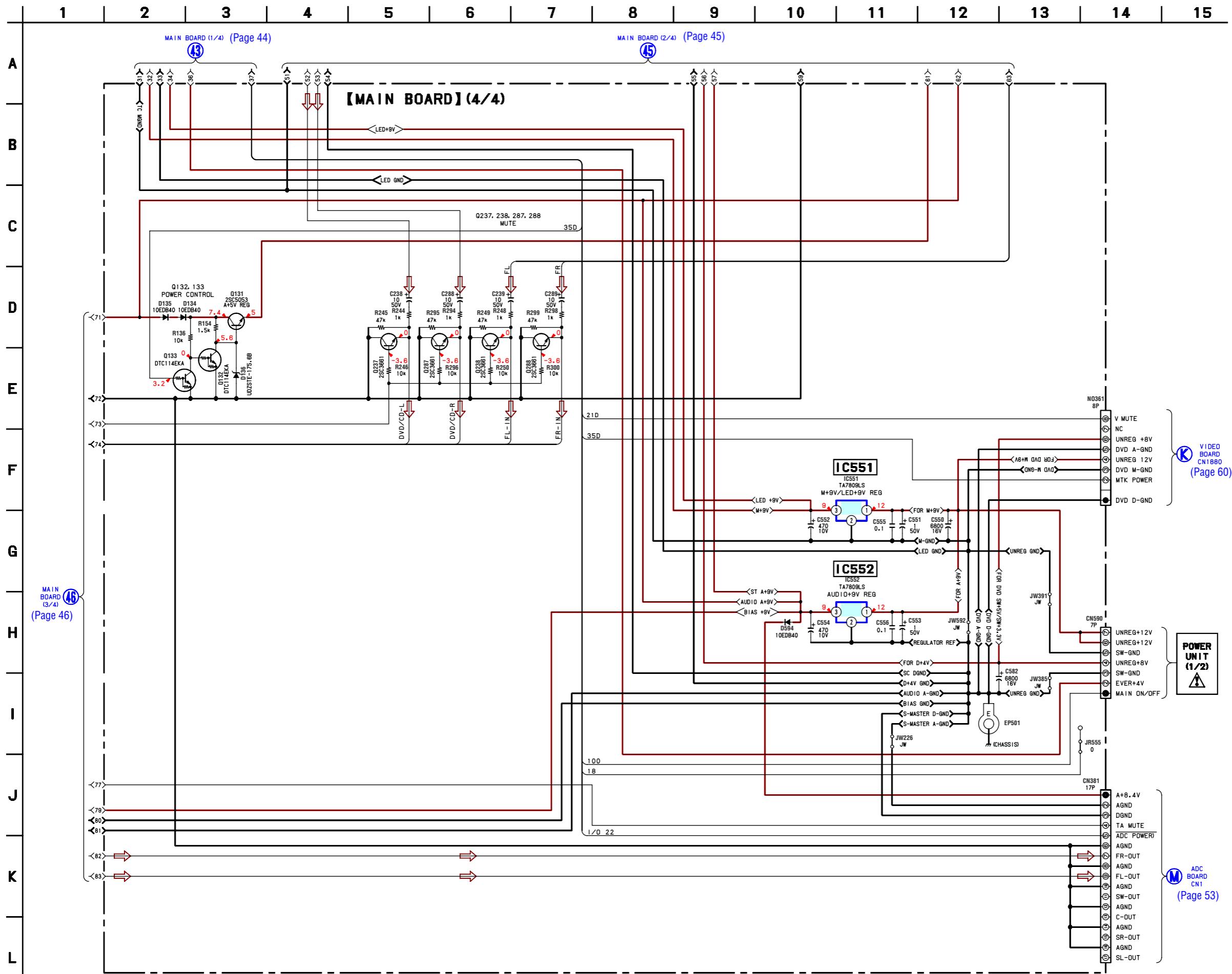
6-17. SCHEMATIC DIAGRAM — MAIN SECTION (2/4) — • Refer to page 74 for IC Pin Description of IC403



## **6-18. SCHEMATIC DIAGRAM — MAIN SECTION (3/4) —**



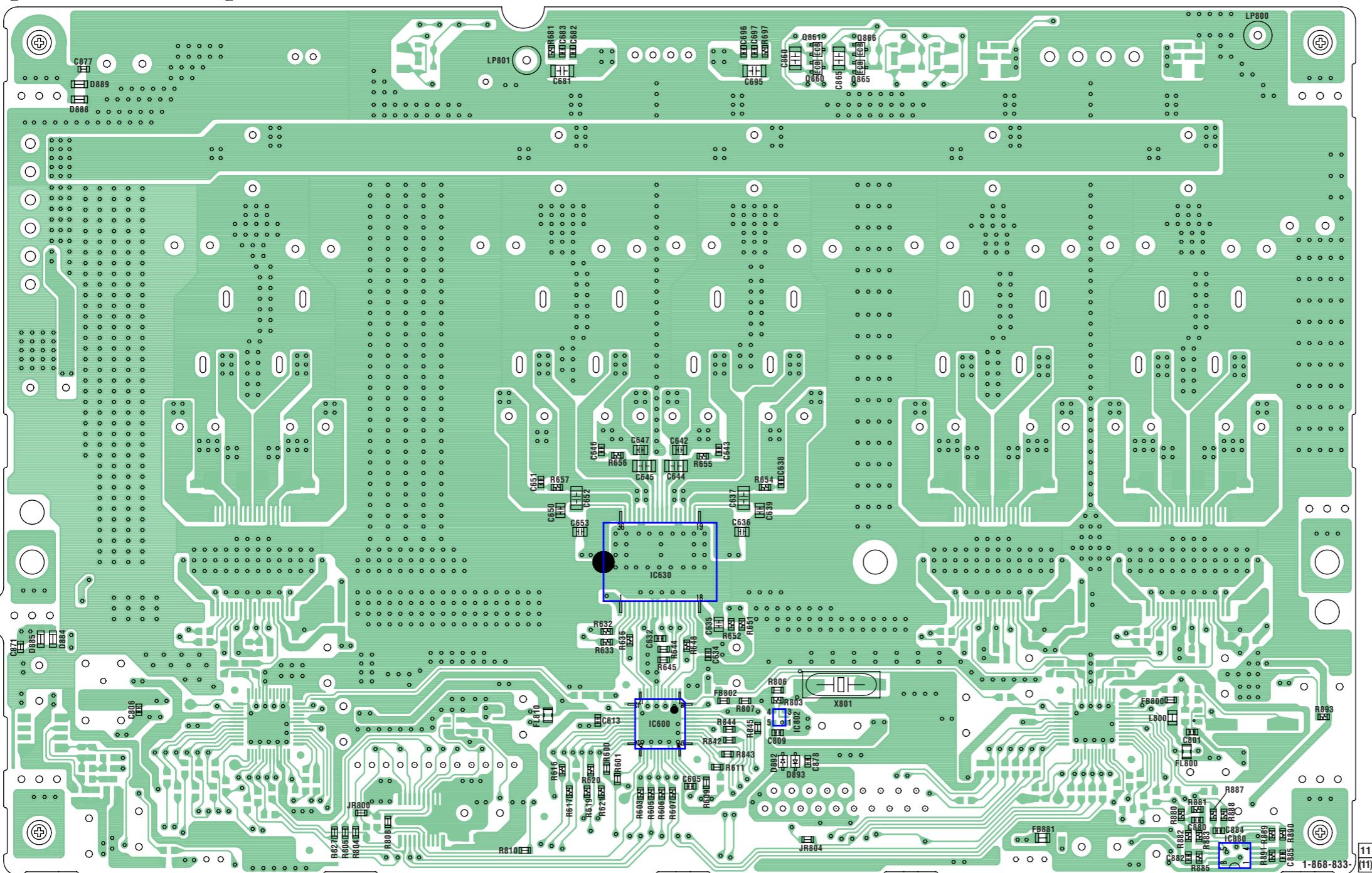
## 6-19. SCHEMATIC DIAGRAM — MAIN SECTION (4/4) —



6-20. PRINTED WIRING BOARD — S-MASTER SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.

12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

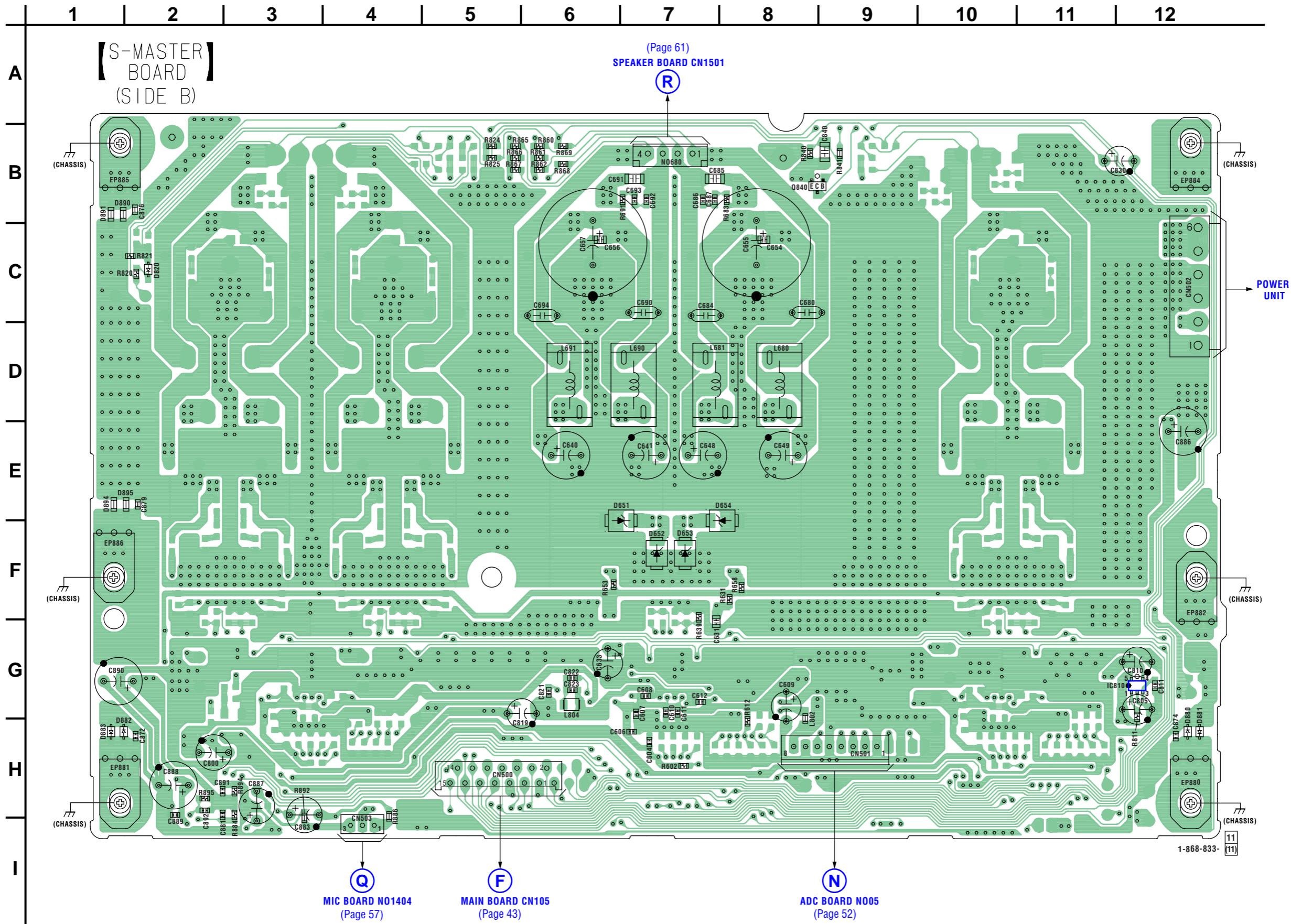
【S-MASTER BOARD】(SIDE A)



• Semiconductor Location

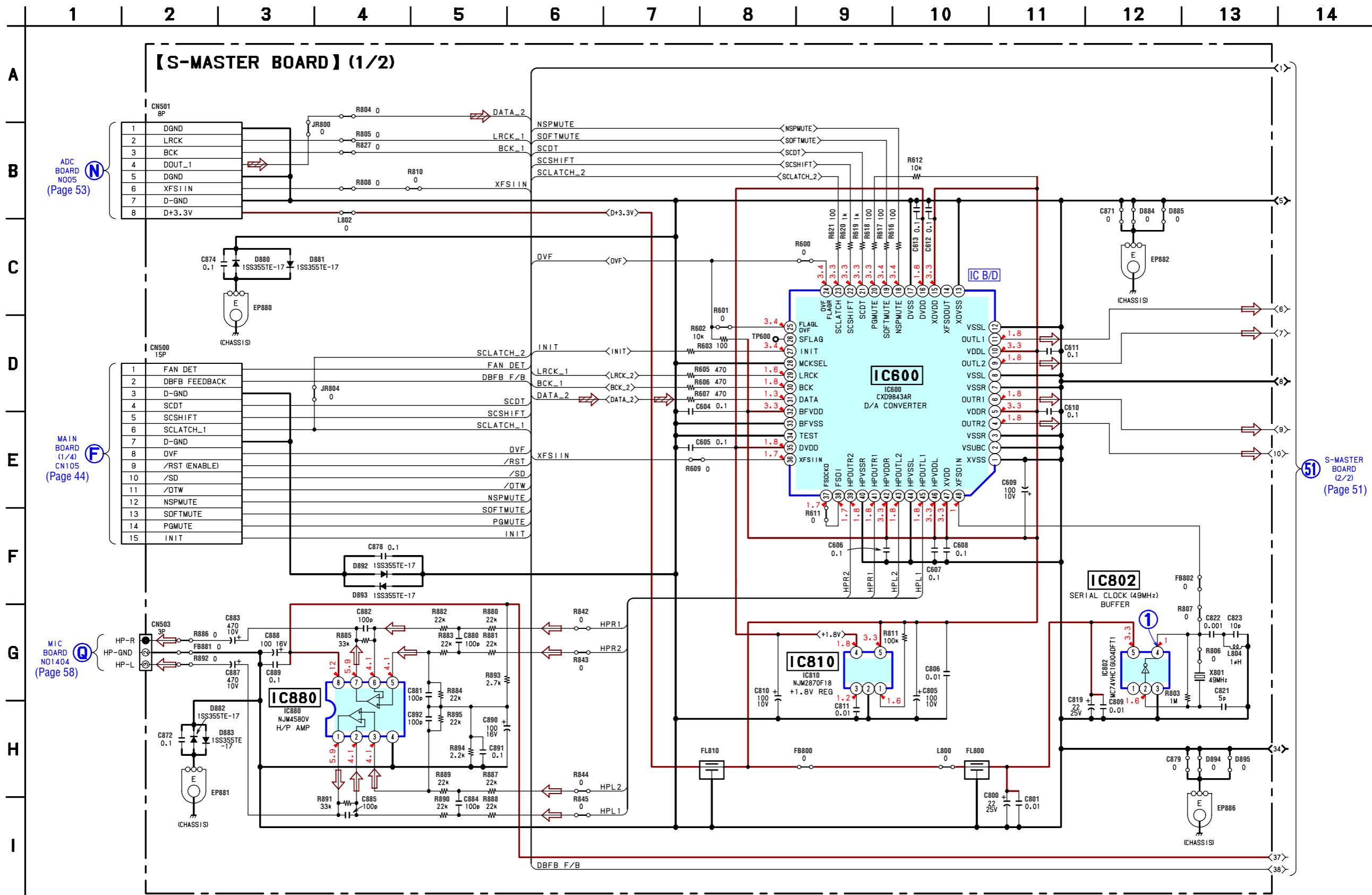
Ref. No.	Location
(D651)	E-7
(D652)	F-7
(D653)	F-7
(D654)	E-7
(D820)	C-2
(D880)	H-12
(D881)	H-12
(D882)	H-1
(D883)	H-1
D892	H-6
D893	H-6
IC600	G-7
IC630	F-7
IC802	G-6
(IC810)	G-12
IC880	H-2
(Q840)	B-8
Q860	B-6
Q861	B-6
Q865	B-5
Q866	B-5

( ): SIDE B

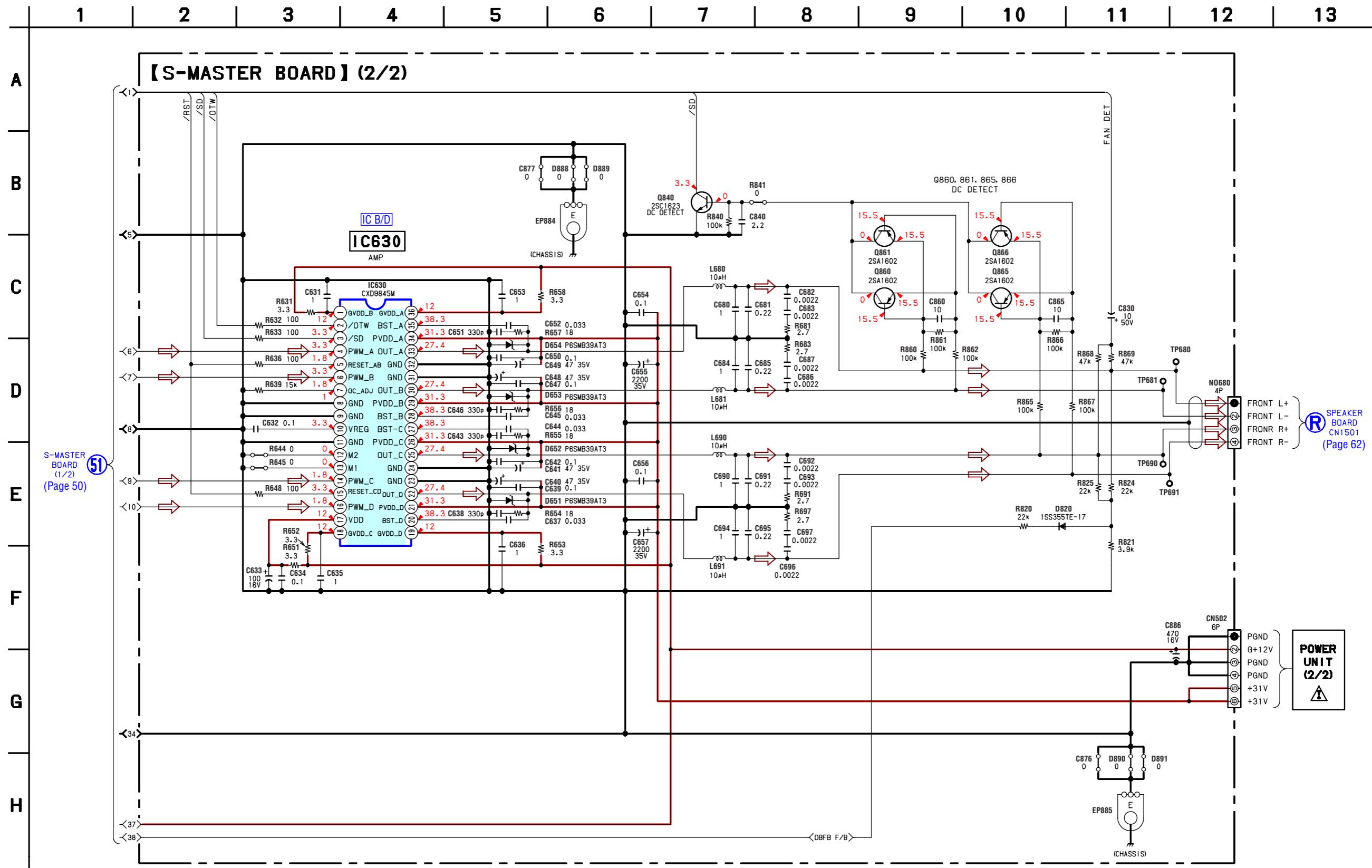


• Refer to page 33 for Waveforms.

## 6-21. SCHEMATIC DIAGRAM — S-MASTER SECTION (1/2) — • Refer to page 64 for IC Block Diagrams.

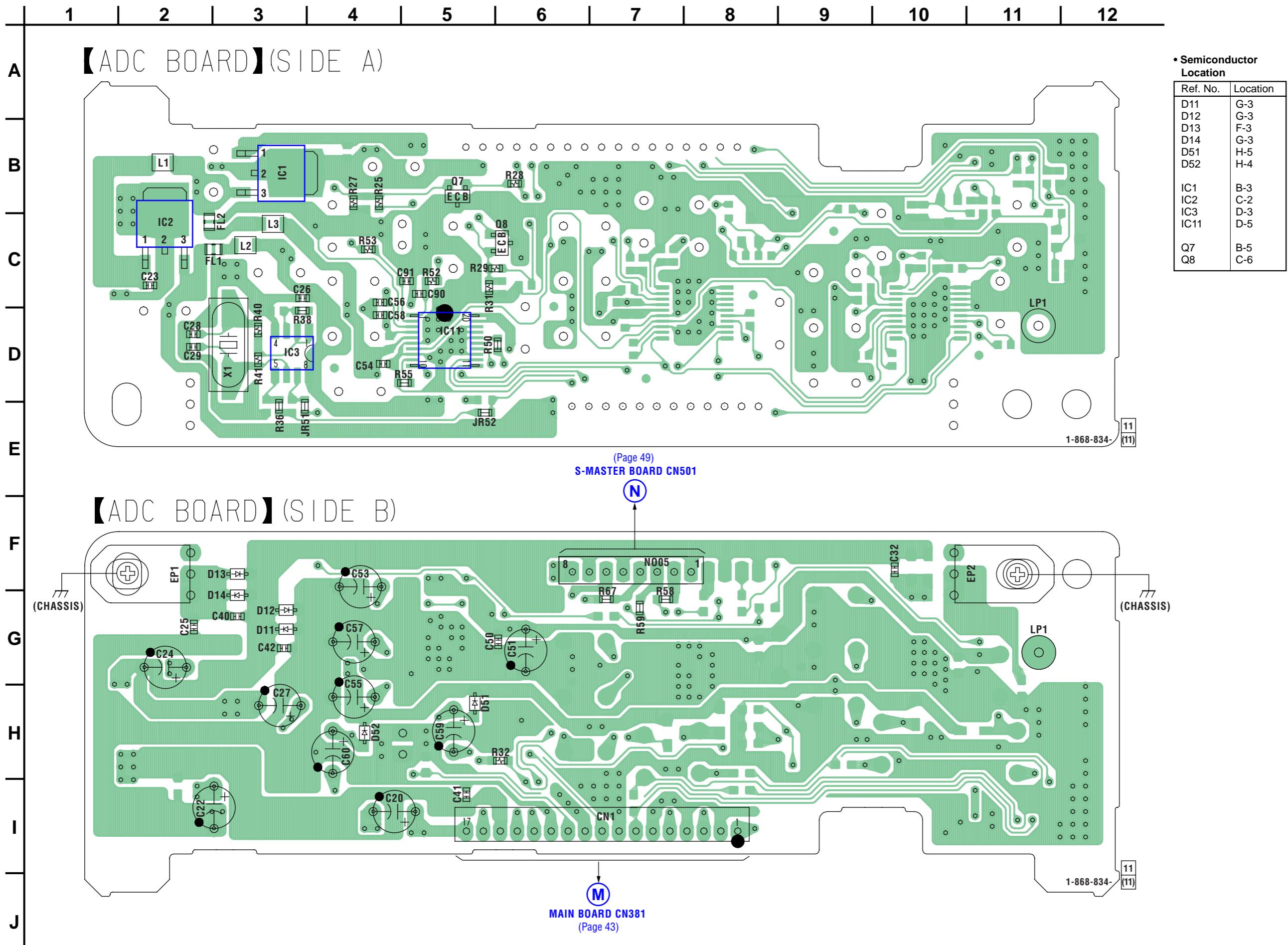


## 6-22. SCHEMATIC DIAGRAM — S-MASTER SECTION (2/2) • Refer to page 65 for IC Block Diagrams.



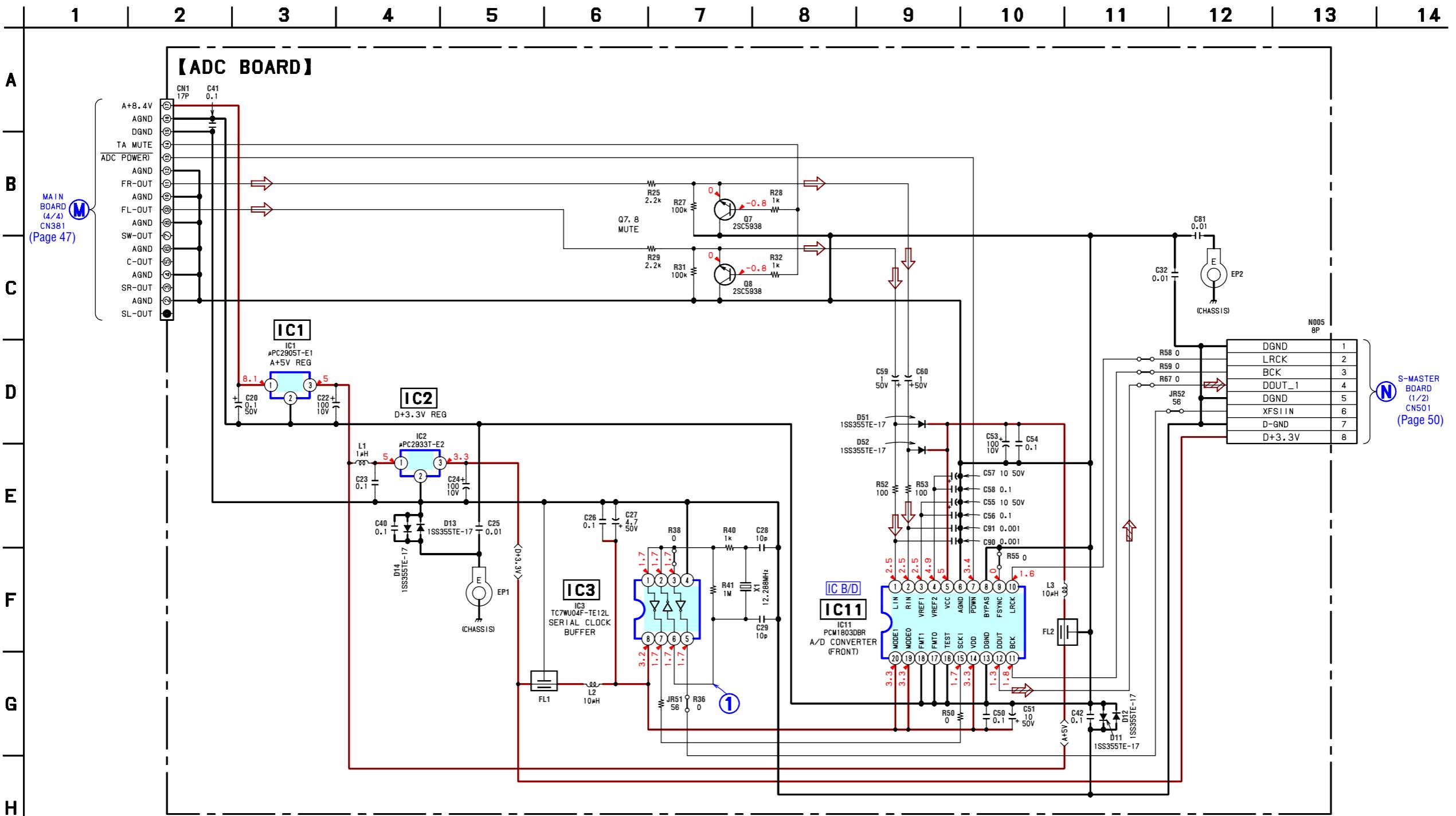
6-23. PRINTED WIRING BOARD — ADC SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder

**L**: Uses unleaded sold

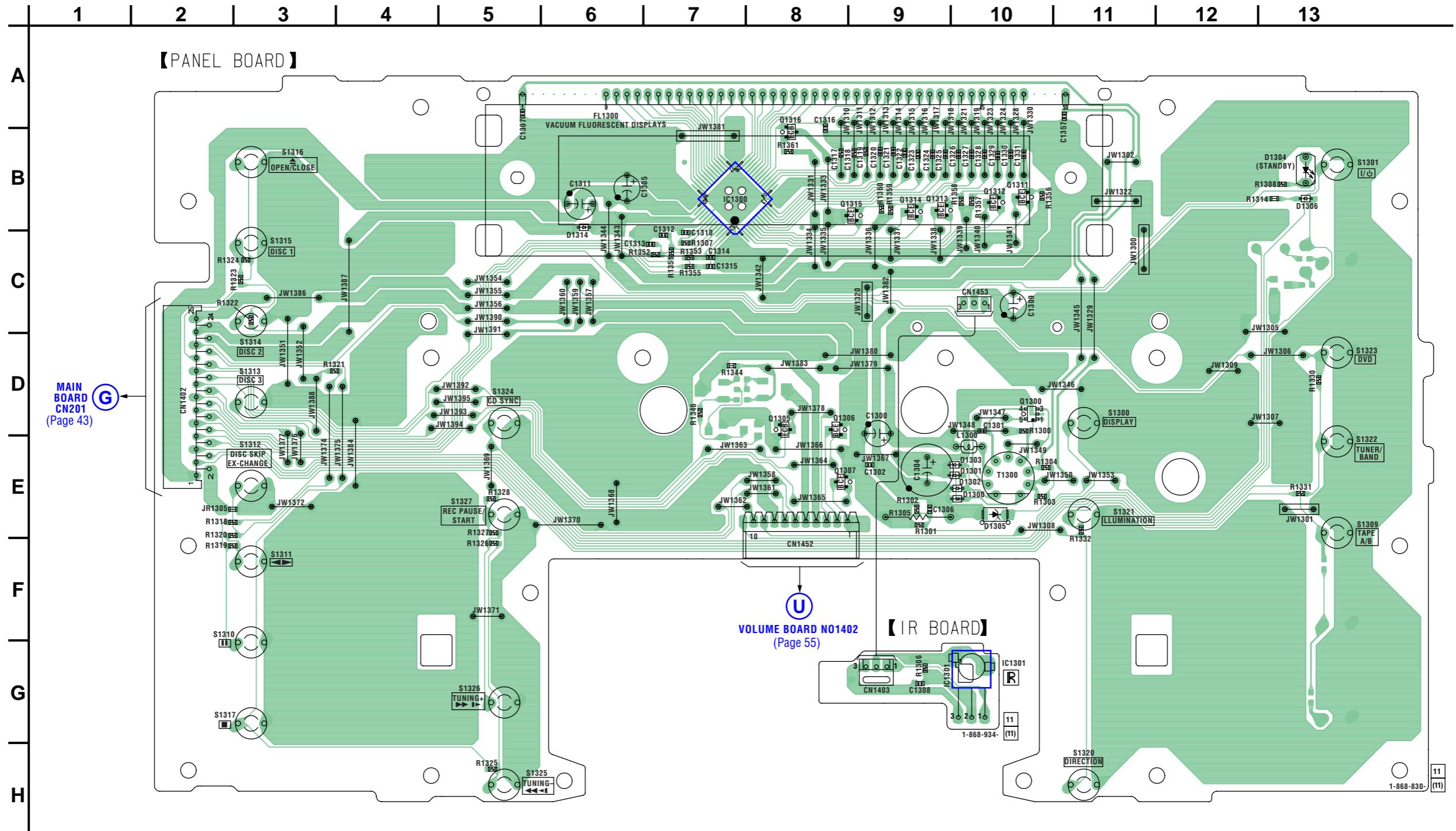


• Refer to page 33 for Waveforms.

**6-24. SCHEMATIC DIAGRAM — ADC SECTION — • Refer to page 64 for IC Block Diagrams.**



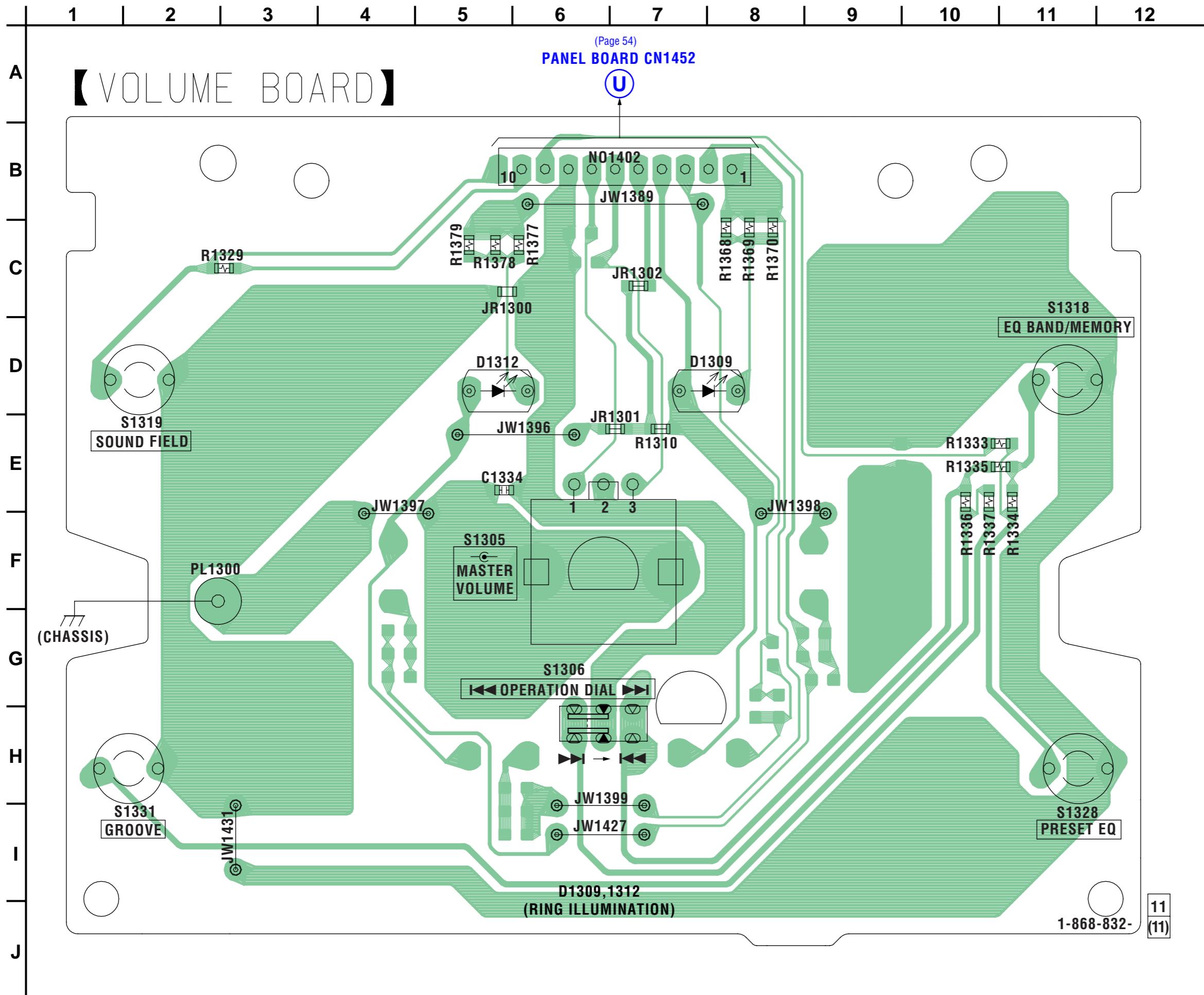
6-25. PRINTED WIRING BOARDS — PANEL SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.



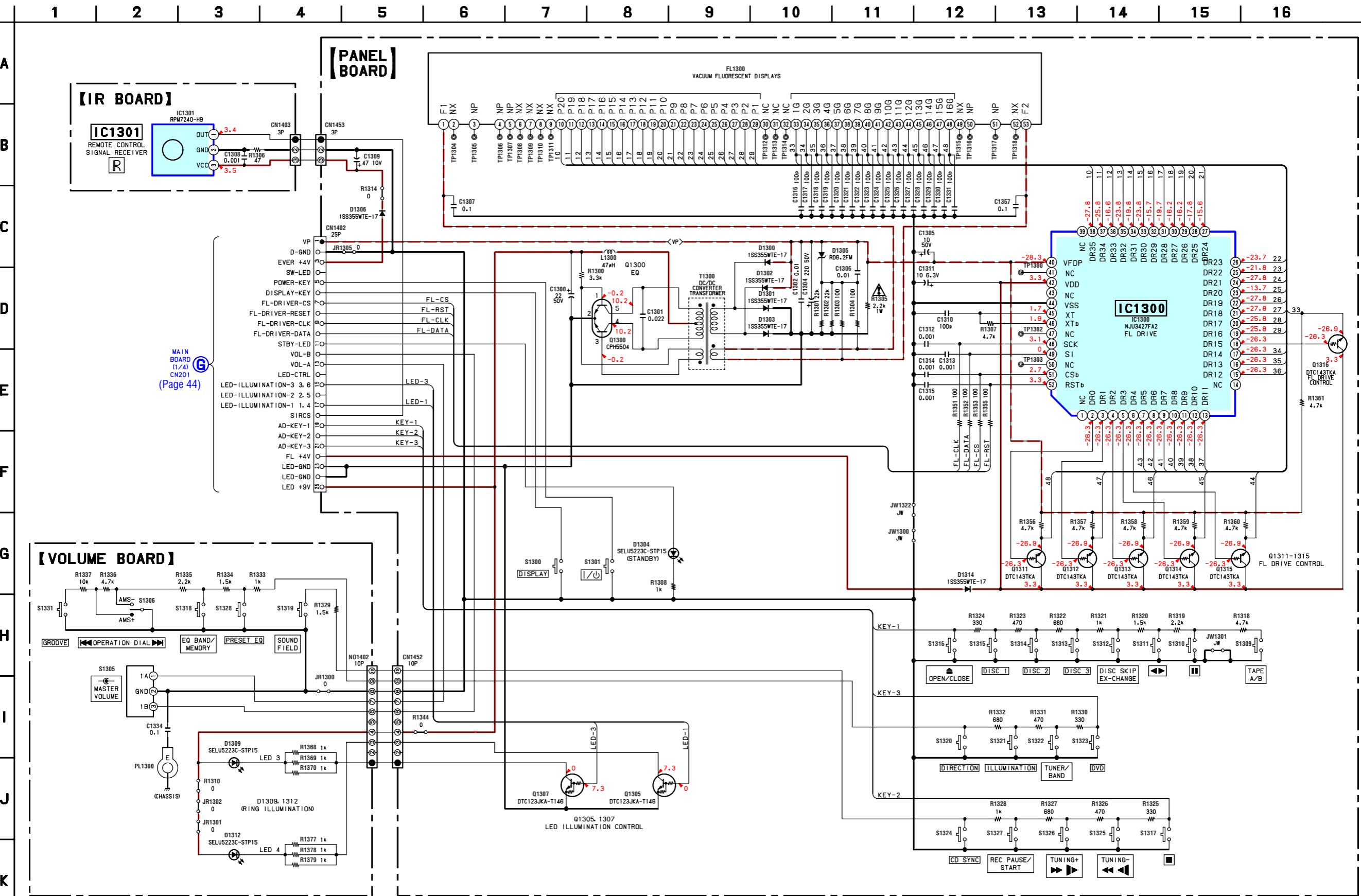
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D1300	E-10	Q1300	D-10
D1301	E-10	Q1305	D-8
D1302	E-10	Q1307	E-8
D1303	E-10	Q1311	B-10
D1304	B-13	Q1312	B-10
D1305	E-10	Q1313	B-9
D1306	B-13	Q1314	B-9
D1314	B-6	Q1315	B-9
IC1300	B-7	Q1316	A-8
IC1301	G-10		

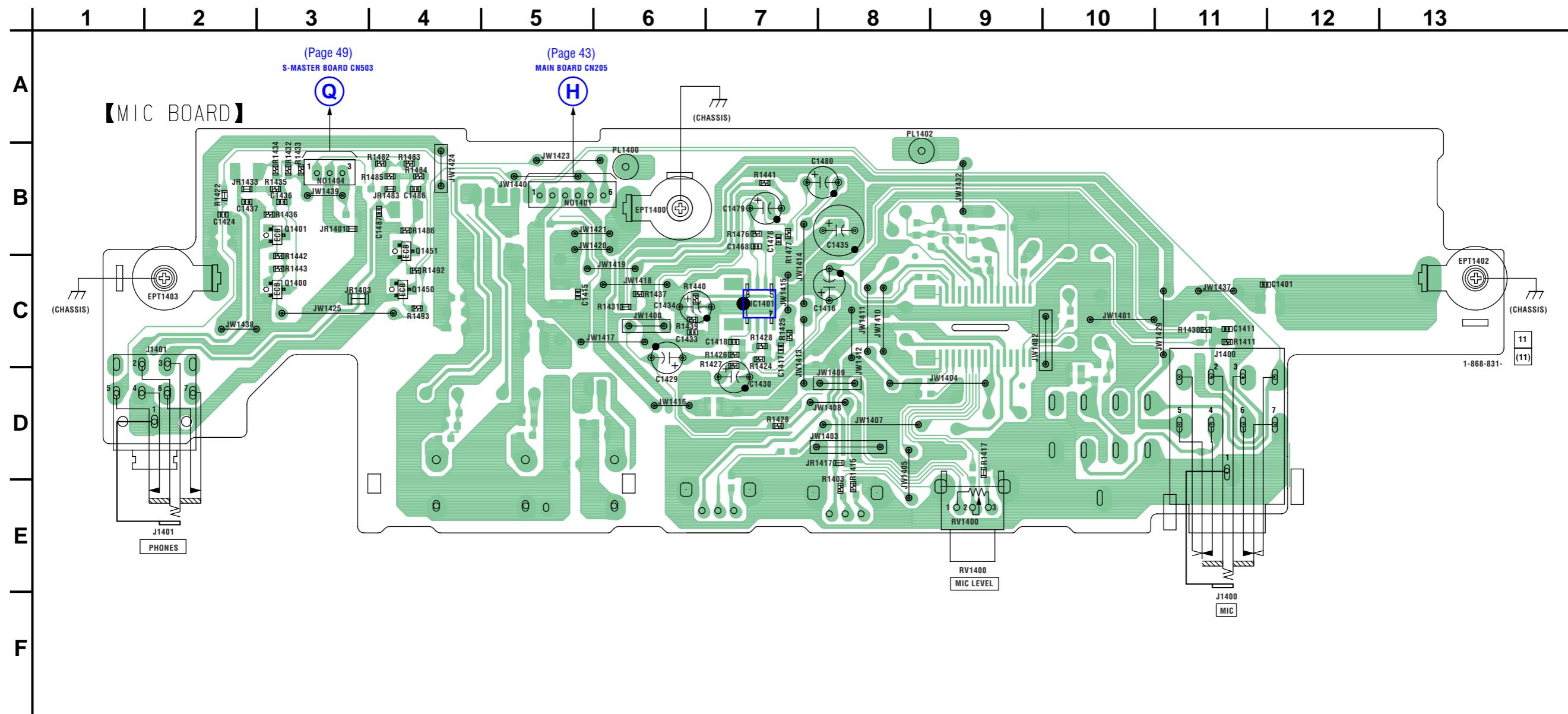
6-26. PRINTED WIRING BOARD — VOLUME SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.



## 6-27. SCHEMATIC DIAGRAM — PANEL SECTION —



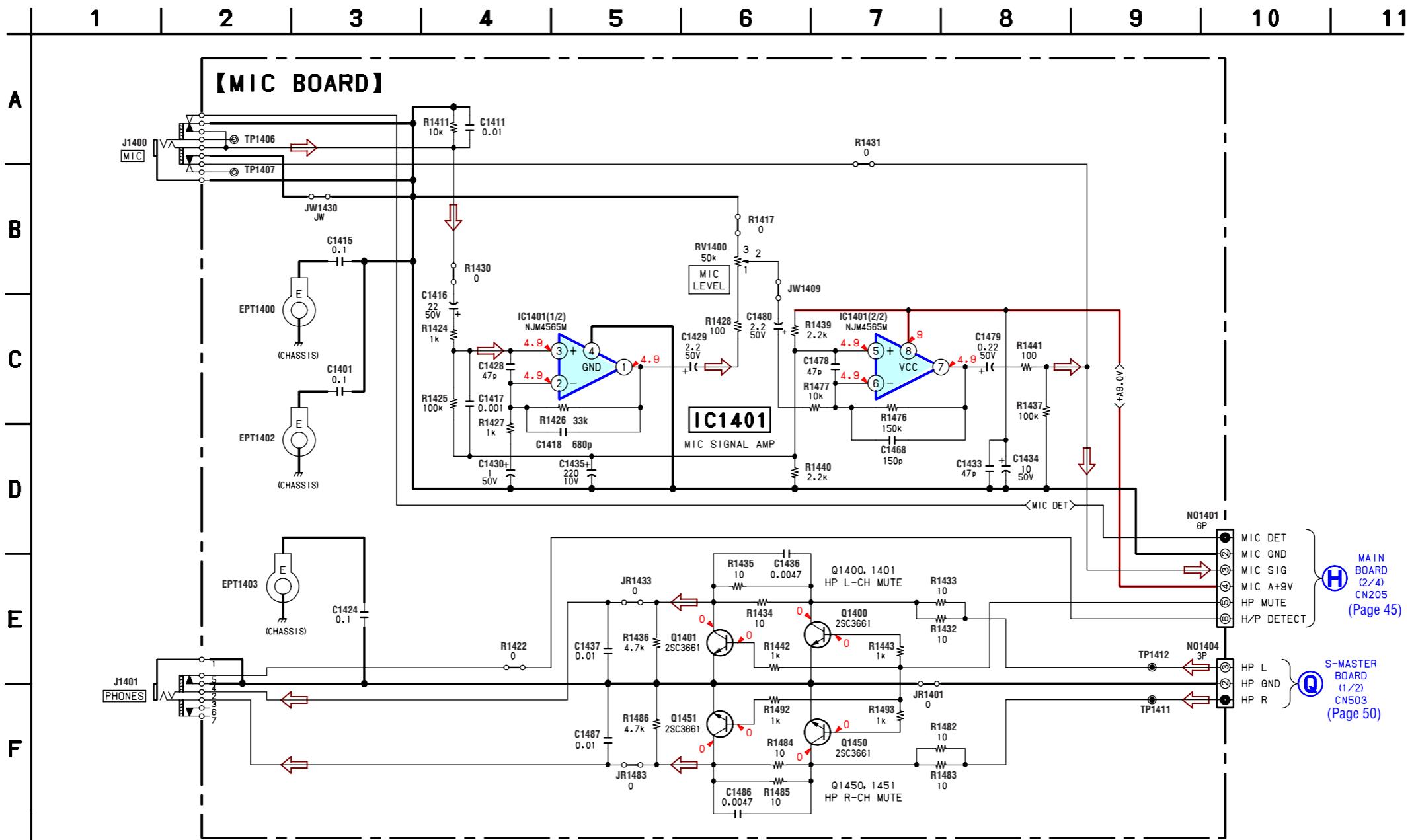
6-28. PRINTED WIRING BOARD — MIC SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.



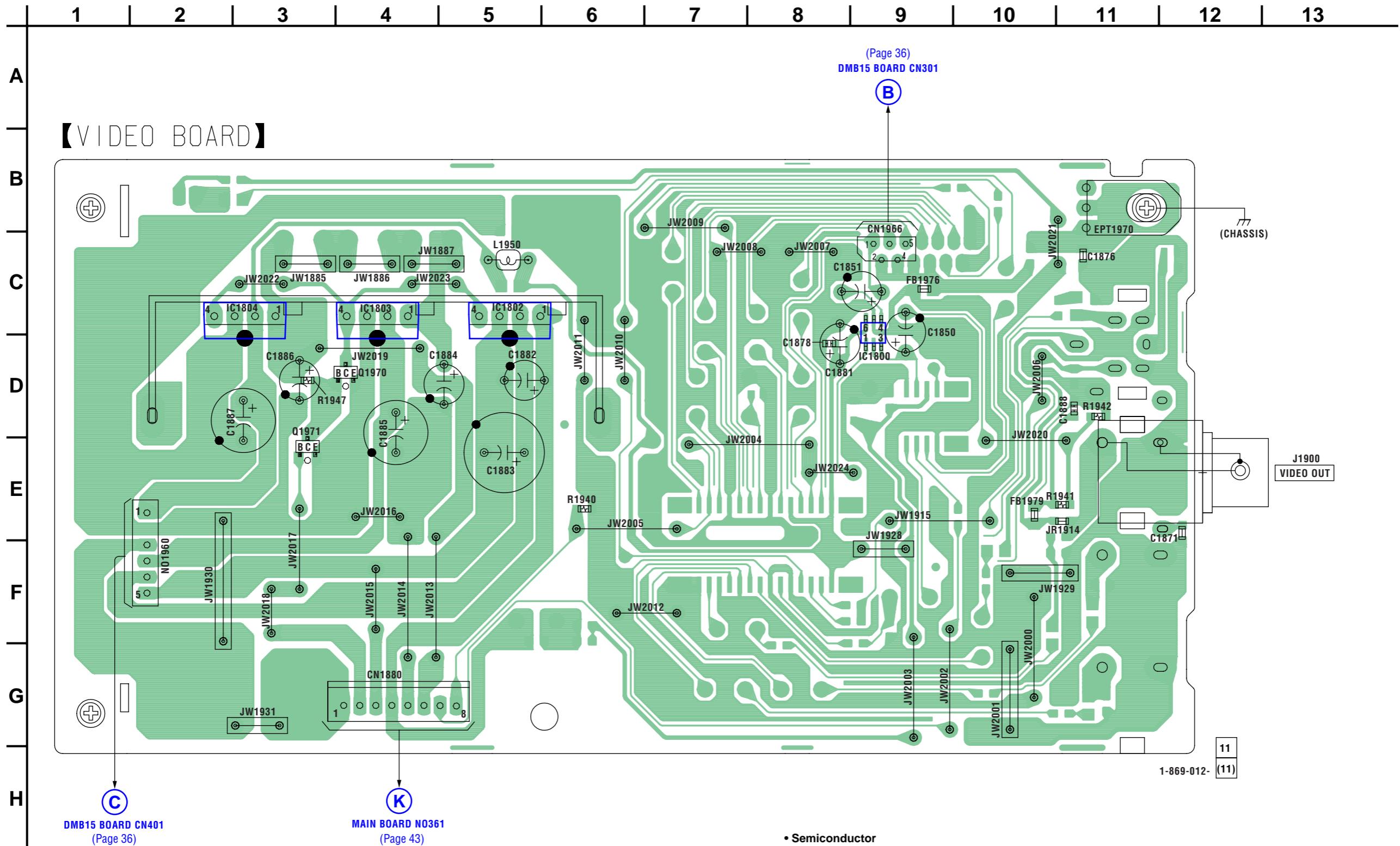
• Semiconductor Location

Ref. No.	Location
IC1401	C-7
Q1400	C-3
Q1401	B-3
Q1450	C-4
Q1451	B-4

## **6-29. SCHEMATIC DIAGRAM — MIC SECTION —**



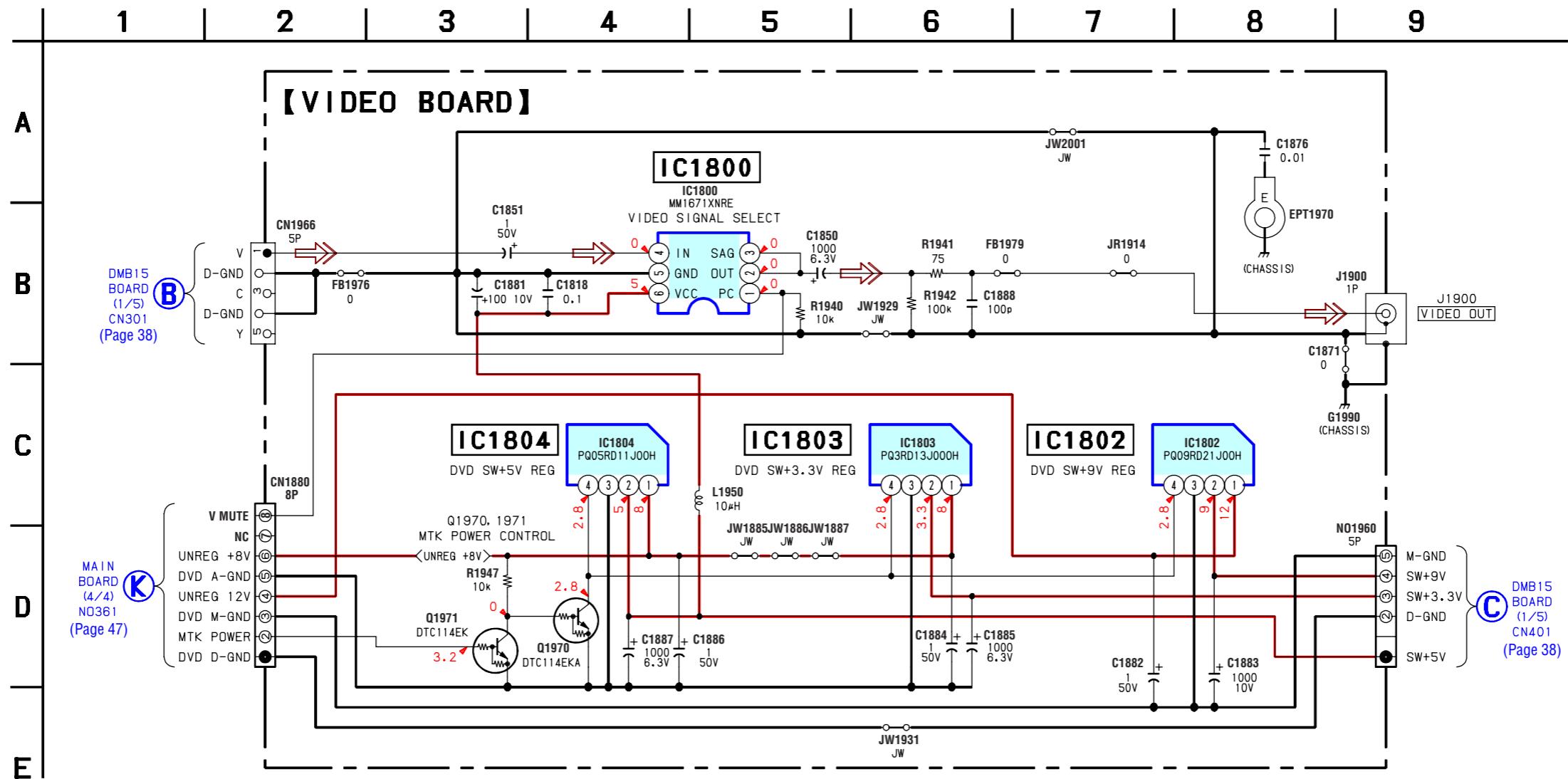
6-30. PRINTED WIRING BOARD — VIDEO SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.



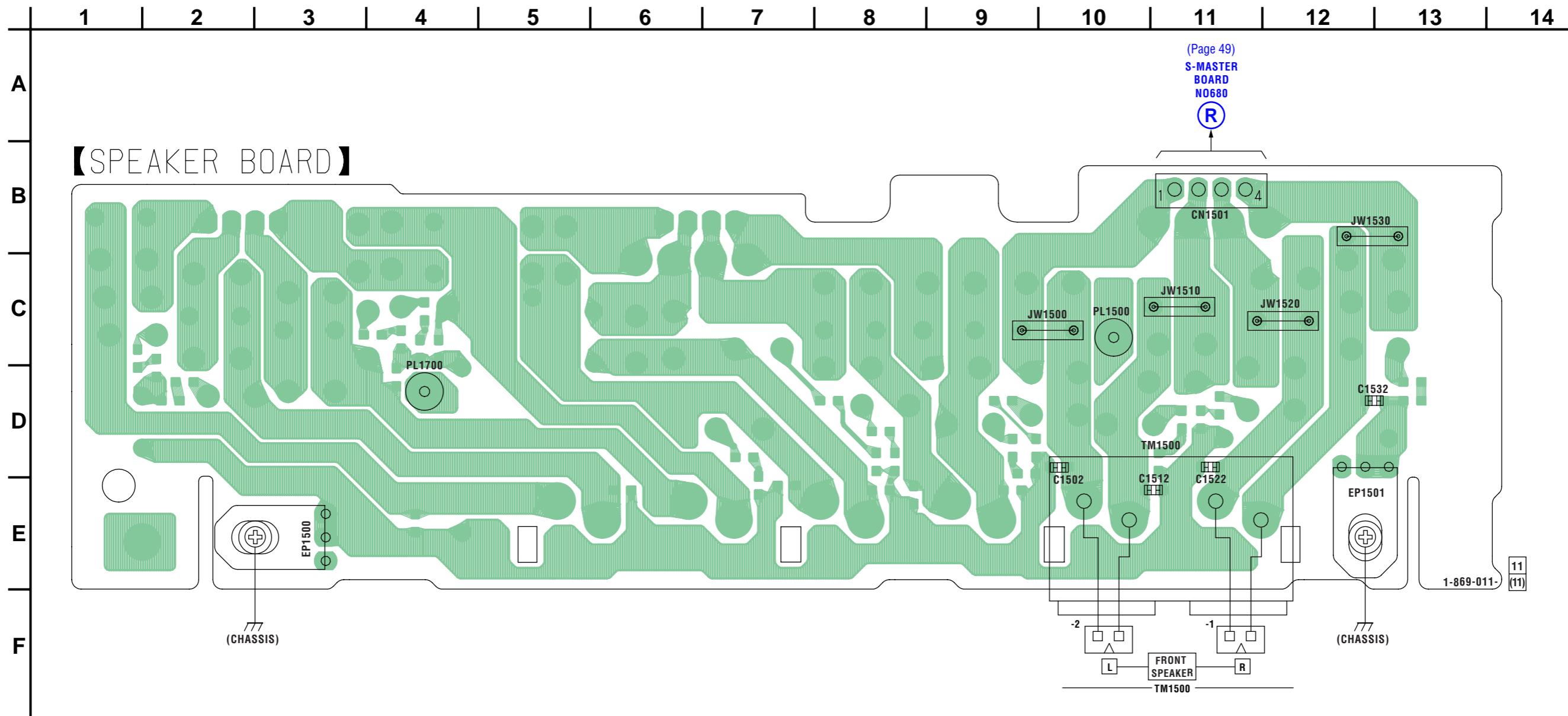
• Semiconductor Location

Ref. No.	Location
IC1800	D-9
IC1802	C-5
IC1803	C-4
IC1804	C-3
Q1970	D-4
Q1971	E-3

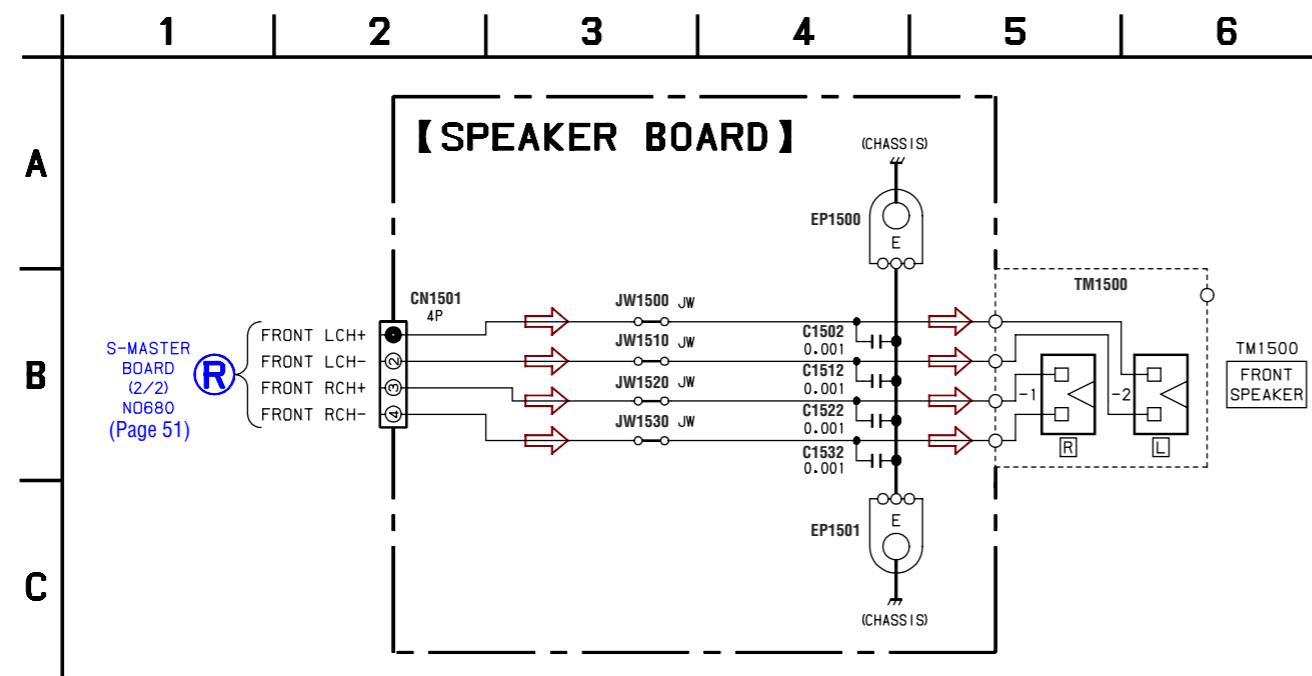
## 6-31. SCHEMATIC DIAGRAM — VIDEO SECTION —



6-32. PRINTED WIRING BOARD — SPEAKER SECTION — • Refer to page 32 for Circuit Boards Location.  : Uses unleaded solder.

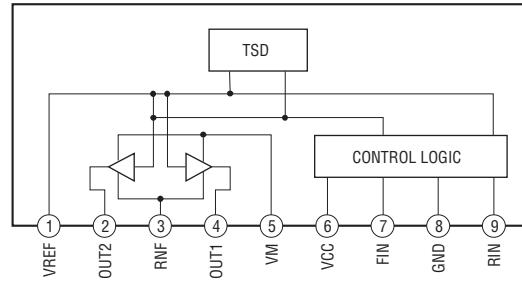


## 6-33. SCHEMATIC DIAGRAM — SPEAKER SECTION —

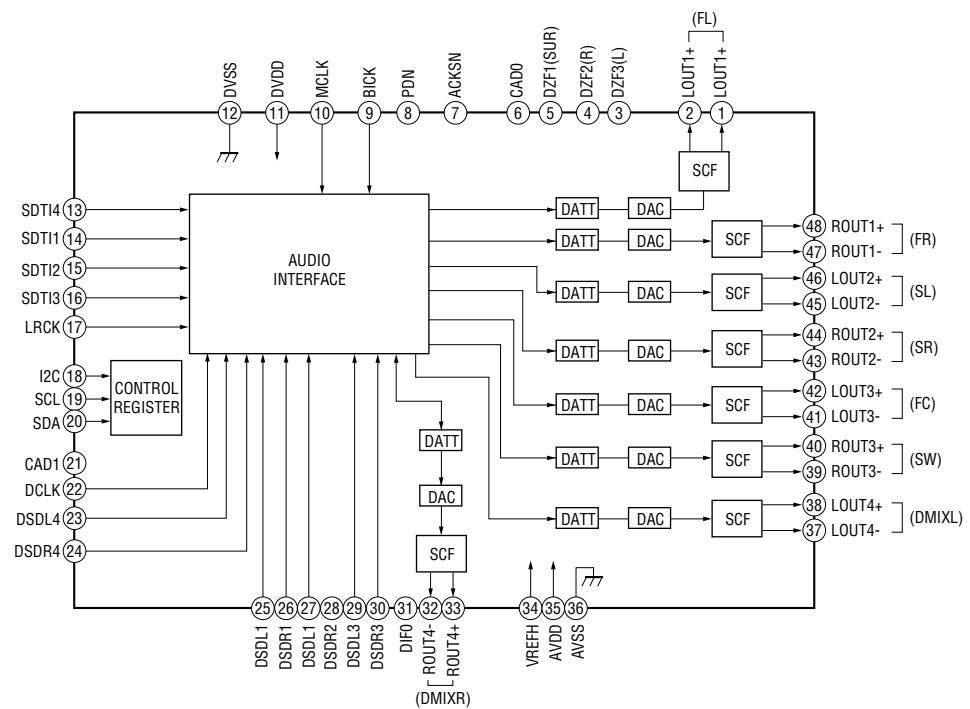


• IC Block Diagrams

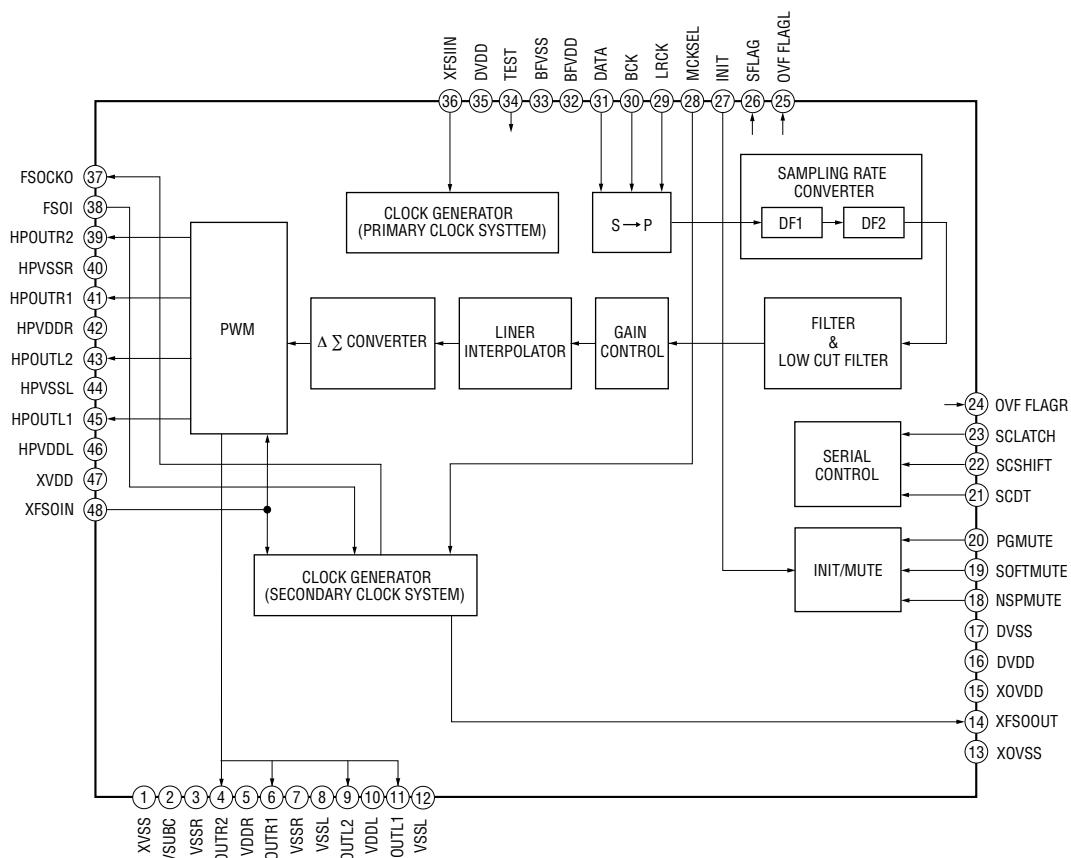
**IC701 BA6956AN (DRIVER Board)**  
**IC712 BA6956AN (DRIVER Board)**



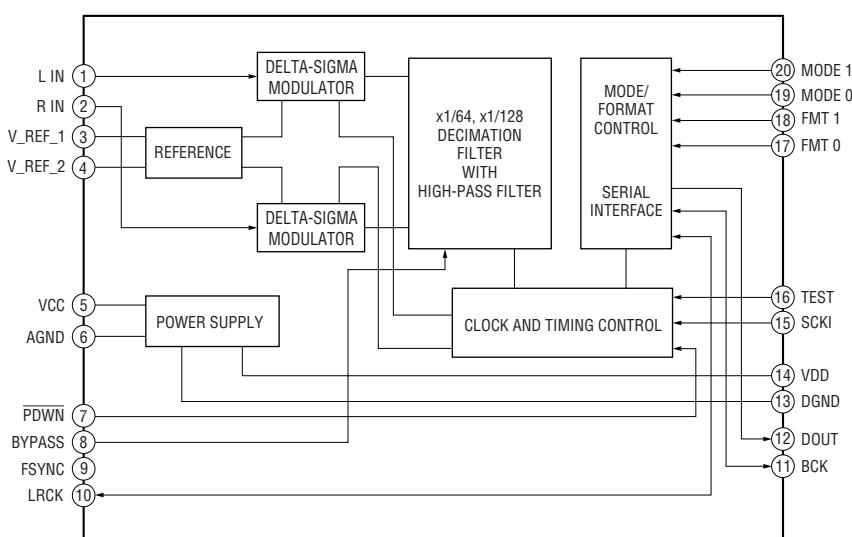
**IC301 AK4358VQ-L (DMB15 Board (2/5))**



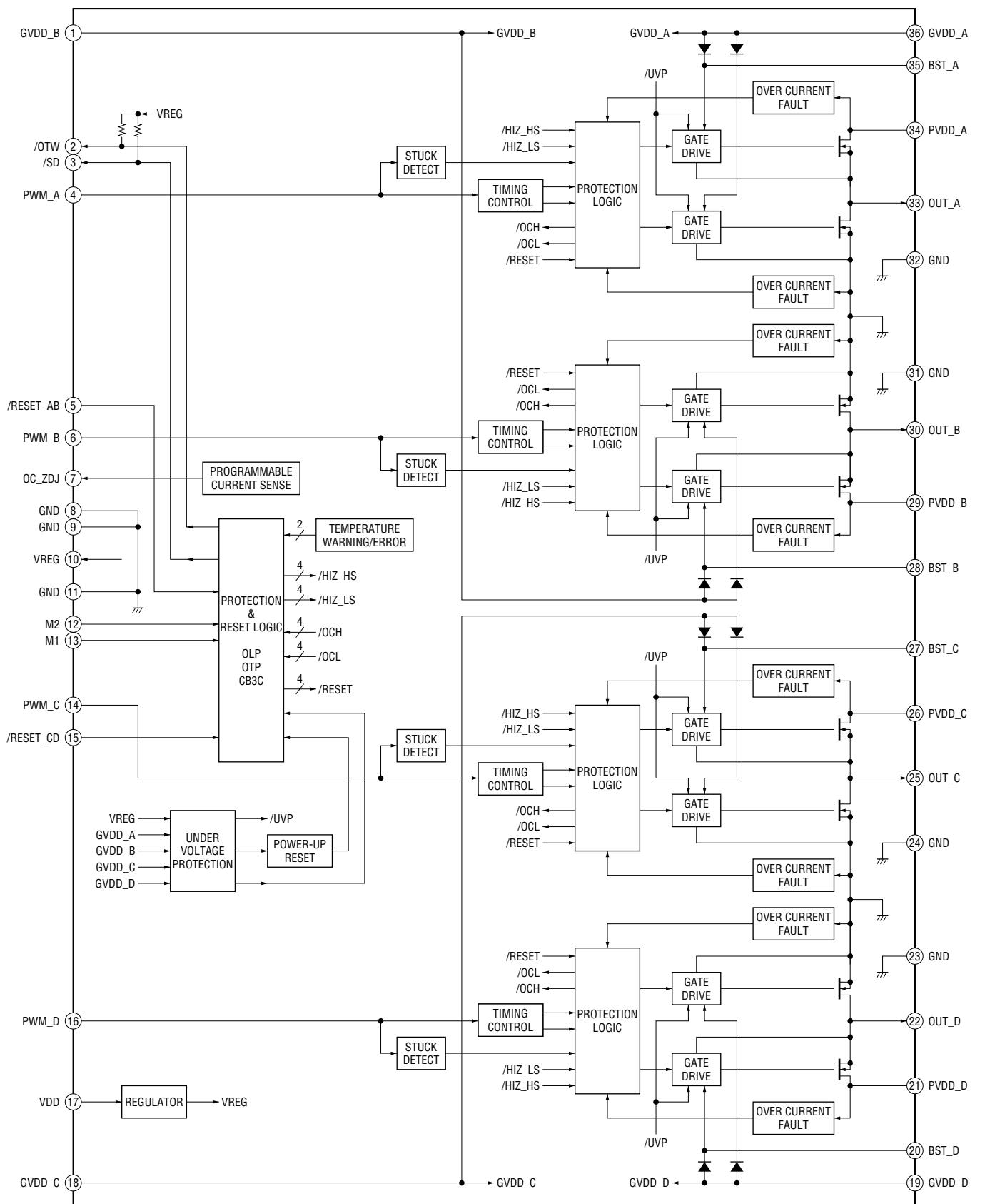
## IC600 CXD9843AR (S-MASTER Board (1/2))



## IC11 PCM1803DBR (ADC Board)



## IC630 CXD9845M (S-MASTER Board (2/2))



## • IC Pin Descriptions

**IC102 CXD9849R (CD/DVD RF AMP, FOCUS/TRACKING ERROR AMP, DVD SYSTEM PROCESSOR, DIGITAL SERVO PROCESSOR) (DMB15 BOARD (3/5))**

Pin No.	Pin Name	I/O	Pin Description
1	AGND	—	Ground pin
2	DVDA	I	AC coupled input path A
3	DVDB	I	AC coupled input path B
4	DVDC	I	AC coupled input path C
5	DVDD	I	AC coupled input path D
6	DVDRFIP	I	AC coupled DVD RF signal input RFIP
7	DVDRFIN	I	AC coupled DVD RF signal input RFIN Not used in this set. (Open)
8	NA	I	DC coupled main-beam RF signal input A
9	NB	I	DC coupled main-beam RF signal input B
10	MC	I	DC coupled main-beam RF signal input C
11	MD	I	DC coupled main-beam RF signal input D
12	SA	I	DC coupled sub-beam RF signal input A Not used in this set. (Open)
13	SB	I	DC coupled sub-beam RF signal input B Not used in this set. (Open)
14	SC	I	DC coupled sub-beam RF signal input C Not used in this set. (Open)
15	SD	I	DC coupled sub-beam RF signal input D Not used in this set. (Open)
16	CDFON	I	CD focusing error negative input Not used in this set. (Open)
17	CDFOP	I	CD focusing error positive input Not used in this set. (Open)
18	TNI	I	3 beam satellite PD signal negative input
19	TPI	I	3 beam satellite PD signal positive input
20	MDI1	I	Laser power PD monitor signal input
21	MDI2	I	Laser power PD monitor signal input
22	LD02	O	Laser drive signal output
23	LD01	O	Laser drive signal output
24	SVDD3	—	Power Supply pin (+3.3 V)
25	CSD	O	Central servo, Positive main beam summing signal output Not used in this set. (Open)
26	RFLVL	O	RFRP low pass, or Positive main beam summing signal output Not used in this set. (Open)
27	SGND	—	Ground pin
28	V2REFO	O	Reference voltage 2.8 V
29	V2O	O	Reference voltage 2.0 V
30	VREFO	O	Reference voltage 1.4 V
31	FEO	O	Focus error monitor signal output Not used in this set. (Open)
32	TEO	O	Tracking error monitor signal output Not used in this set. (Open)
33	TEZISLV	O	TE Slicing Level Not used in this set.
34	OPOUT	O	Op amp output Not used in this set. (Open)
35	OPIN	I	Op amp negative input Not used in this set. (Open)
36	OPIN	I	Op amp positive input Not used in this set. (Open)
37	DMO	O	Disk motor control signal output. PWM signal output
38	FMO	O	Feed motor signal control. PWM signal output
39	TROPENPWM	O	Tray PWM output/Tray open signal output.
40	IOPMON	I	General PWM signal input
41	TRO	O	Tracking servo signal output
42	FOO	O	Focus servo signal output
43	DVSS	—	Ground pin
44	NC	—	Not used. (Open)
45	NC	—	Not used. (Open)
46	DVDD3	—	Power Supply pin (+3.3 V)
47	SPFG	I	Motor Hall sensor signal input
48	DSEL	O	Select signal output

Pin No.	Pin Name	I/O	Pin Description
49	WIDE	I	Wide signal output Not used in this set. (Open)
50	MSW	O	Volume control signal output
51	MAMUTE	O	MAMUTE signal output to System Controller Not used in this set. (Open)
52	DVDD18	—	Power Supply pin (+1.8 V)
53 to 58	IOA 2 to 7	O	Address bus 2 to 7 output to PROM
59	HIGHA0	O	Address bus 8 output to PROM
60, 61	IOA18, 19	O	Address bus 18, 19 output to PROM
62	DVSS	—	Ground pin
63	APLLCAP	I	APLL External Capacitance connection
64	APLLVSS	—	Ground pin
65	VDD3	—	Power Supply pin (+3.3 V)
66	IOWA	O	WE signal output to PROM
67	A16	O	Address bus 16 output to PROM
68 to 72	HIGHA 7 to 3	O	Address bus 15 to 11 output to PROM
73	DVDD3	—	Power Supply pin (+3.3 V)
74, 75	HIGHA 2, 1	O	Address bus 10, 9 output to PROM
76	IOA20	O	Address bus 20 output to PROM
77	IOCS	O	CE signal output to PROM
78	IOA1	O	Address bus 1 output to PROM
79	IOOE	O	OE signal output to PROM
80	DVDD3	—	Power Supply pin (+3.3 V)
81 to 84	AD 0 to 3	I	Data bus 0 to 3 input from PROM
85	DVSS	—	Ground pin
86 to 88	AD 4 to 6	I	Data bus 4 to 6 input from PROM
89	IOA21	O	Address bus 21 output to PROM
90	ALE	O	Address latch enable Not used in this set. (Open)
91	AD7	I	Data bus 7 input from PROM
92	A17	O	Address bus 17 output to PROM
93	IOA0	O	Address bus 0 output to PROM
94	DVSS	—	Ground pin
95	UWA	I	System Controller write strobe Not used in this set. (Open)
96	URD	I	System Controller read strobe Not used in this set. (Open)
97	DVDD18	—	Power Supply pin (+1.8 V)
98	IFSDO	I	DVD SDO signal input from System Controller
99	IFCK	O	DVD SCO signal output to System Controller
100	XIFCS	I	DVD XIFCS signal input from System Controller
101	IFSDI	I	VIFBUSY signal output from System Controller
102	SCL	O	SCL signal output to EEPROM
103	SDA	O	SDA signal output to EEPROM
104	TRG-SW	O	RS232 RXD signal output Not used in this set. (Open)
105	IFBSY	I	RS232 TXD signal input from System Controller
106	RXD	I	RD232 RXD clock
107	TXD	I	RD232 TXD data
108	DVDD3	—	Power Supply pin (+3.3 V)
109	ICE	I	ICE mode enable Not used in this set. (Open)
110	PRST	I	MTRST signal input from System Controller
111	IR	I	IR control signal input Not used in this set. (Open)
112	INT0	I	External interrupt 0 Not used in this set. (Open)
113	DQMO	O	DQMO signal output to SD-RAM
114	MREQ	I	DQM signal input
115	RD7	I	Data bus 7 from SD-RAM
116	DVSS	—	Ground pin
117, 118	RD 6, 5	I	Data bus 6, 5 from SD-RAM

Pin No.	Pin Name	I/O	Pin Description
119	DVSS	—	Ground pin
120, 121	RD 4, 3	I	Data bus 4, 3 from SD-RAM
122	DVDD18	—	Power Supply pin (+1.8 V)
123 to 125	RD 2 to 0	I	Data bus 2 to 0 from SD-RAM
126	RD15	I	Data bus 15 from SD-RAM
127	DVDD3	—	Power Supply pin (+3.3 V)
128	RD 14	I	Data bus 14 from SD-RAM
129 to 133	RD 13 to 9	I	Data bus 13 to 9 from SD-RAM
134	DVSS	—	Ground pin
135	RD8	I	Data bus 8 from SD-RAM
136	GPIO	—	Not used in this set. (Open)
137	DQM1	O	DQM1 signal output to SD-RAM
138	RWE	O	WE signal output to SD-RAM
139	CAS	O	CAS signal output to SD-RAM
140	RAS	O	RAS signal output to SD-RAM
141	DVDD3	—	Power Supply pin (+3.3 V)
142	RCS	O	RCS signal output to SD-RAM
143	BA0	O	BA0 signal output to SD-RAM
144	DVSS	—	Ground pin
145	BA1	O	BA1 signal output to SD-RAM
146	RA10	O	Address bus 10 output to SD-RAM
147	RA0	O	Address bus 0 output to SD-RAM
148	DVSS	—	Ground pin
149 to 151	RA 1 to 3	O	Address bus 1 to 3 output to SD-RAM
152	DVDD18	—	Power Supply pin (+1.8 V)
153	NC	—	Not used. (Open)
154	NC	—	Not used. (Open)
155	DVDD3	—	Power Supply pin (+3.3 V)
156	RCLK	O	CLK signal output to SD-RAM
157	CKE	O	CKE signal output to SD-RAM
158 to 160	RA 11 to 8	O	Address bus 11 to 8 output to SD-RAM
161	DVSS	—	Ground pin
162	RA7	O	Address bus 7 output to SD-RAM
163	DVSS	—	Ground pin
164 to 166	RA 6 to 4	O	Address bus 6 to 4 output to SD-RAM
167	DVDD3	—	Power Supply pin (+3.3 V)
168	DISC/X	—	Not used in this set. (Open)
169	RGB	O	RGB control signal output Not used in this set. (Open)
170	TSD M	O	TSDM signal output
171	NC	—	Not used in this set. (Open)
172	NC	—	Not used in this set. (Open)
173	DVDD18	—	Power Supply pin (+1.8 V)
174	FWD	—	Not used in this set. (Open)
175	NC	—	Not used. (Open)
176	LIMSW	O	LIMSW signal output to Optical pick-up
177	OCSW	I	SEN signal input from System Controller/OCSW signal input Not used. (Open)
178	REW	—	Not used in this set. (Open)
179	CKSW	I	CKSW signal input Not used in this set. (Open)
180	NC	—	Not used in this set. (Open)
181	NC	—	Not used in this set. (Open)
182	DVDD3	—	Power Supply pin (+3.3 V)
183	NC	—	Not used in this set. (Open)
184	NC	—	Not used in this set. (Open)

Pin No.	Pin Name	I/O	Pin Description
185	NC	—	Not used in this set. (Open)
186	NC	—	Not used in this set. (Open)
187	NC	—	Not used in this set. (Open)
188	NC	—	Not used in this set. (Open)
189	DAVCC	—	Power Supply pin (+3.3 V)
190	VREF	I	Bandgap reference voltage Not used in this set. (Open)
191	FS	O	Full scale adjustment (pull down)
192	YUV0	—	Not used in this set. (Open)
193	DAVSS	—	Ground pin
194	YUV1	O	Y signal output to VIDEO AMP
195	DAVDD	—	Power Supply pin (+3.3 V)
196	YUV2	O	CHROMA signal output to VIDEO AMP
197	DAVSS	—	Ground pin
198	YUV3	O	VIDEO signal output to VIDEO AMP
199	DAVDD	—	Power Supply pin (+3.3 V)
200	YUV4	O	Not used in this set. (Connect to VCC.)
201	DAVSS	—	Ground pin
202	YUV5	O	Not used in this set. (Connect to VCC.)
203	YUV6	O	Not used in this set. (Connect to VCC.)
204	DVDD3	—	Power Supply pin (+3.3 V)
205	MIC/VSYNC	I	Microphone status signal input
206	VOICE/YUV7	I	Not used in this set. (Connect to VCC.)
207	KRMOB/HSYNC	O	Karaoke mode detection signal output
208	SMSCK	I	Not used in this set. (Open)
209	SPDATA/SMSDI	I	Audio data of SPDIF input Not used in this set. (Connect to VCC.)
210	MUTE	O	Mute signal output
211	MUTE123	O	Mute signal output
212	DVDD3	—	Power Supply pin (+3.3 V)
213	ALRCK	I	Audio left/right channel clock signal input
214	ABCK	O	Audio bit clock signal output
215	ACLK	I	Audio DAC master clock signal input
216	DVSS	—	Ground pin
217	ASDATA0	O	Auio serial data signal output
218	ASDATA1	O	Auio serial data signal output
219	ASDATA2	O	Auio serial data signal output
220	XRST	O	Reset signal output
221	DVDD18	—	Power Supply pin (+1.8 V)
222	ASDATA4	O	Auio serial data signal output
223	DVSS	—	Ground pin
224	DWIDE	—	Not used in this set. (Open)
225	SDPIF	O	SPDIF signal output
226	RFGND18	—	Ground pin
227	RFVDD18	—	Power Supply pin (+1.8 V)
228	ZTALO	O	Oscillator signal output (27 MHz)
229	ZTALI	I	Oscillator signal input (27 MHz)
230	JITFO	O	RF jitter meter output
231	JITFN	I	Negative input of operation amplifier for RF jigger meter
232	PLLVSS	—	Ground pin
233	IDAC	—	Not Used.
234	PLLVDD3	—	Power Supply pin (+3.3 V)
235	LPFON	O	Negative output of loop filter amplifier
236	LPFIP	I	Positive input of loop filter amplifier
237	LPFIN	I	Negative input of loop filter amplifier

Pin No.	Pin Name	I/O	Pin Description
238	LPFOP	O	Positive output of loop filter amplifier
239	VDD3	I	Power Supply pin (+3.3 V)
240	NC	—	Not used. (Open)
241	VSS	—	Ground pin
242	NC	—	Not used. (Open)
243	NC	—	Not used. (Open)
244	RFVDD3	—	Power Supply pin (+3.3 V)
245	RFRPDC	I	RFRP signal input
246	RFRPAC	I	RFRP signal input
247	HRFZC	I	High frequency RF ripple zero crossing
248	CRTPLP	O	Defect level filter capacitor connecting
249	RFGND	—	Ground pin
250	NC	—	Not used. (Open)
251	NC	—	Not used. (Open)
252	OSP	O	RF offset cancellation capacitor connecting
253	OSN	I	RF offset cancellation capacitor connecting
254	RGFC	O	RF offset loop capacitor connecting for DVD-ROM
255	IREF	I	Current reference input
256	AVDD3	—	Power Supply pin (+3.3 V)

## IC401 M30622MEP-A50FPU0 (SYSTEM CONTROL) (MAIN BOARD (1/4))

Pin No.	Pin Name	I/O	Pin Description
1	SW CHANNEL SELECT	O	Signal path selection signal for sub woofer channel “L”: LFE, “H”: Subwoofer out from M61537 Not used in this set. (Open)
2	SURR CHANNEL SELECT	O	Signal path selection signal for surround channel “L”: SL/FR (MTK), “H”: Tone out from M61537 Not used in this set. (Open)
3	SM LATCH 3	O	Serial data latch pulse output to the S-Master Processor
4	SIRCS	I	Remote control signal input
5	NO USE	I	Not used. (Connect to ground.)
6	NO USE	I	Not used. (Connect to ground.)
7	NO USE	I	Not used. (Connect to ground.)
8	BYTE	—	Ground pin
9	CNVSS	—	Ground pin
10	XC IN	I	Sub system clock input (32.768 kHz)
11	XC OUT	O	Sub system clock output (32.768 kHz)
12	RESET	I	System reset signal input from the reset signal IC “L”: reset After the power supply rises, “L” is input for several hundreds msec and then change to “H”.
13	X OUT	O	Main system clock output (5 MHz)
14	VSS	—	Ground pin
15	X IN	I	Main system clock input (5 MHz)
16	VCC	—	Power supply pin (+3.3 V)
17	NMI	I	Non-maskable interrupt input
18	NO USE	I	Not used. (Connect to ground.)
19	NO USE	I	Not used. (Connect to ground.)
20	AC CUT	I	AC off detection signal input from the reset signal IC “L”: AC Cut detected
21	VIDEO MUTE	O	Video muting on/off control signal output “L”: muting on
22	VIDEO OUT SW	O	Composite video output switching output control “L”: DVD VIDEO output, “H”: VIDEO VIDEO input
23	MIC DETECT	I	Microphone connection detection signal input “L”: headphone connected
24	KRMOD	I	Karaoke Mode detection signal input
25	MIC STATUS	O	Microphone status output to DVD Motherboard “L”: Microphone is not connected, “H”: Microphone is connected
26	MTK RESET	O	Reset signal output to DVD Motherboard “L”: reset
27	MTK XIFCS	I	Communication Initialization Request Acknowledgement Signal from DVD Motherboard
28	MTK BUSY	O	Communication Initialization Request Signal to DVD Motherboard
29	IIC CLK	I/O	Clock signal for IIC communication between the microcomputer and the IIC checker
30	IIC DATA	I/O	Data signal for IIC communication between the microcomputer and the IIC checker
31	MTK SIO	O	Serial data output signal to DVD Motherboard
32	MTK SOD	I	Serial data input signal from DVD Motherboard
33	MTK CLK	I	Serial data clock signal to DVD Motherboard
34	DVD A MUTE	O	DVD analog signal muting on/off control signal output “H”: muting on
35	MTK POWER	O	Power supply control signal to DVD Motherboard “H”: Power supply on
36	ST CE	O	PLL chip enable signal output to the tuner unit
37	MC DIN	I	PLL serial data input from the tuner unit
38	ST CLK	O	PLL serial data transfer clock signal output to the tuner unit
39	MC DOUT	O	PLL serial data output to the tuner unit
40	TUNED	I	Tuning detection signal input from the tuner unit “L”: tuned
41	OPEN SW	I	Eject detection signal input from CDM
42	TBL SENSE	I	Disc tray position detection signal input from CDM
43	E3	I	Disc tray status detection signal input from CDM
44	E2	I	Disc tray status detection signal input from CDM
45	E1	I	Disc tray status detection signal input from CDM
46	TM F	O	CDM turning motor control signal output

Pin No.	Pin Name	I/O	Pin Description
47	TM R	O	CDM turning motor control signal output
48	LM F	O	CDM loading motor control signal output
49	LM R	O	CDM loading motor control signal output
50	LED ILLUMINATION 1	O	Dynamic LED drive signal output to the ILLUMINATION 1st indicator and 2nd indicator "H": LED on
51	LED ILLUMINATION 2	O	Dynamic LED drive signal output to the ILLUMINATION 3rd indicator and 4th indicator "H": LED on
52	LED ILLUMINATION 3	O	Dynamic LED drive signal output to the ILLUMINATION 5th indicator and 6th indicator "H": LED on
53	LED CTRL	O	Dynamic LED drive select signal output
54	VOL A	I	Jog dial pulse input from the VOLUME rotary encoder (A phase input)
55	VOL B	I	Jog dial pulse input from the VOLUME rotary encoder (B phase input)
56	STBY LED	O	LED drive signal output of POWER indicator "H": LED is turned on
57	FL DRIVER DATA	O	Serial data output signal to FL Driver, NJU3427
58	FL DRIVER CLK	O	Serial data clock signal to FL Driver, NJU3427
59	FL DRIVER RESET	O	Serial data reset signal to FL Driver, NJU3427
60	FL DRIVER CS	O	Serial data chip select signal to FL Driver, NJU3427
61	SW LED	O	LED drive signal output of SUB WOOFER ON indicator "H": LED ON
62	VCC	—	Power supply pin (+3.3 V)
63	A HALF	I	Deck A cassette detection signal input "H": cassette detected
64	VSS	—	Ground pin
65	SM RESET	O	Reset signal output to the S-Master Power IC
66	IO EXP DATA OUT	O	Serial data output signal to I/O expander, BH2210V
67	NO USE	I	Not used. (Connect to ground.)
68	IO EXP RST	O	Reset signal output to the I/O expander, BH2210V
69	IO EXP CLK	O	Serial data clock signal to I/O expander, BH2210V
70	IO EXP LAT	O	Serial data latch signal to I/O expander, BH2210V
71	NO USE	I	Not used. (Connect to ground.)
72	SM SD	I	Shutdown (protector) detection signal from the S-Master power IC
73	DISPLAY KEY	I	DISPLAY key press detection signal (Interrupt input)
74	POWER KEY	I	POWER key press detection signal (Interrupt input)
75	NO USE	I	Not used. (Connect to ground.)
76	SM LATCH 1	O	Serial data latch pulse output to the S-Master Processor
77	SM CLK	O	Serial data transfer clock signal to the S-Master Processor IC (CXD9843)
78	SM DATA	O	Serial data output signal to the S-Master Processor IC (CXD9843)
79	SM LATCH 2	O	Serial data latch pulse output to the S-Master Processor
80	NO USE	I	Not used. (Connect to ground.)
81	NO USE	O	Not used. (Connect to ground.)
82	OUT2DLY SEL	I	PWM Mode selection signal "L": PWM Mode 3, "H": PWM Mode 4
83	M61537 DATA	O	Serial data output to audio signal processor, M61537FP
84	M61537 CLK	O	Serial data transfer clock signal output to audio signal processor, M61537FP
85	HP DET	I	Headphone connection detection signal input "H": headphone connected
86	HP MUTE	O	Headphone muting on/off control signal "H": muting on
87	NO USE	I	Not used. (Connect to ground.)
88	VACS IN	I	VACS level detection signal
89	A SHUT	I	Shut off detection signal input from deck A side reel pulse detector (A/D input)
90	B SHUT	I	Shut off detection signal input from deck B side reel pulse detector (A/D input)
91	B HALF	I	Deck B cassette detection and forward side recording tab detection signal input (A/D input)
92	MODEL IN	I	Model setting (A/D input)
93	DEST IN	I	Destination setting (A/D input)
94	AD KEY 3	I	Key signal input (A/D input)
95	AD KEY 2	I	Key signal input (A/D input)

Pin No.	Pin Name	I/O	Pin Description
96	AVSS	—	Ground pin
97	AD KEY 1	I	Key signal input (A/D input)
98	VREF	I	A/D Converter reference voltage input (+3.3 V)
99	AVCC	—	Power supply pin (+3.3 V) (for A/D conversion)
100	MAIN ON/OFF	O	Main power on/off control signal output “H”: power on

**IC403 BH2210FV-E2 (SIGNAL IN/OUT CONTROL) (MAIN BOARD (2/4))**

Pin No.	Pin Name	I/O	Pin Description
1	CTLIO	I	IN/OUT control port (Fixed at "H" in this set.)
2	RESET	I	Reset signal input
3	CLK	I	Serial data clock signal input
4	LATCH	I	Serial data latch signal input
5	TC-MUTE	O	Tape playback muting on/off control signal output "H": muting on
6	NO USE	O	Not used. (Open)
7	REC MUTE	O	Recording muting on/off control signal output "L": muting on
8	NO USE	O	Not used. (Open)
9	SM-NSP-MUTING	O	S master processor IC PWM 50% duty muting on/off control signal output "L": muting on
10	SM-SOFT-MUTING	O	S master processor IC soft muting on/off control signal output "L": muting on
11	SM-PG-MUTE	O	S master processor IC PWM muting on/off control signal output "L": muting on
12	SM-INIT	O	Initialization signal to the S master processor IC
13	LATCHO	O	Serial data latch output signal Not used. (Open)
14	CLKO	O	Serial data clock signal output Not used. (Open)
15	DO1	O	Serial data signal output 1 Not used. (Open)
16	DI2	I	Serial data signal input 2 Not used. (Connect to ground.)
17	A-TRIG	O	Deck A side trigger plunger drive signal output "H": plunger on
18	CAMP-CNT	O	Capstan motor drive signal output
19	B-TRIG	O	Deck B side trigger plunger drive signal output "H": plunger on
20	REC BIAS	O	Recording bias on/off control signal output "H": bias on
21	TC RELAY	O	Recording/playback selection signal output "H": recording, "L": playback
22	ADC RESET	O	Power down control signal to analog to digital converter "L": power down
23	NO USE	O	Not used. (Open)
24	FAN CTRL	O	Fan driving signal output "L": fan on Not used in this set. (Open)
25	DO2	O	Not used. (Open)
26	DI1	I	Serial data signal input
27	VSS	—	Ground pin
28	VDD	—	Power supply pin (+3 V)

## SECTION 7

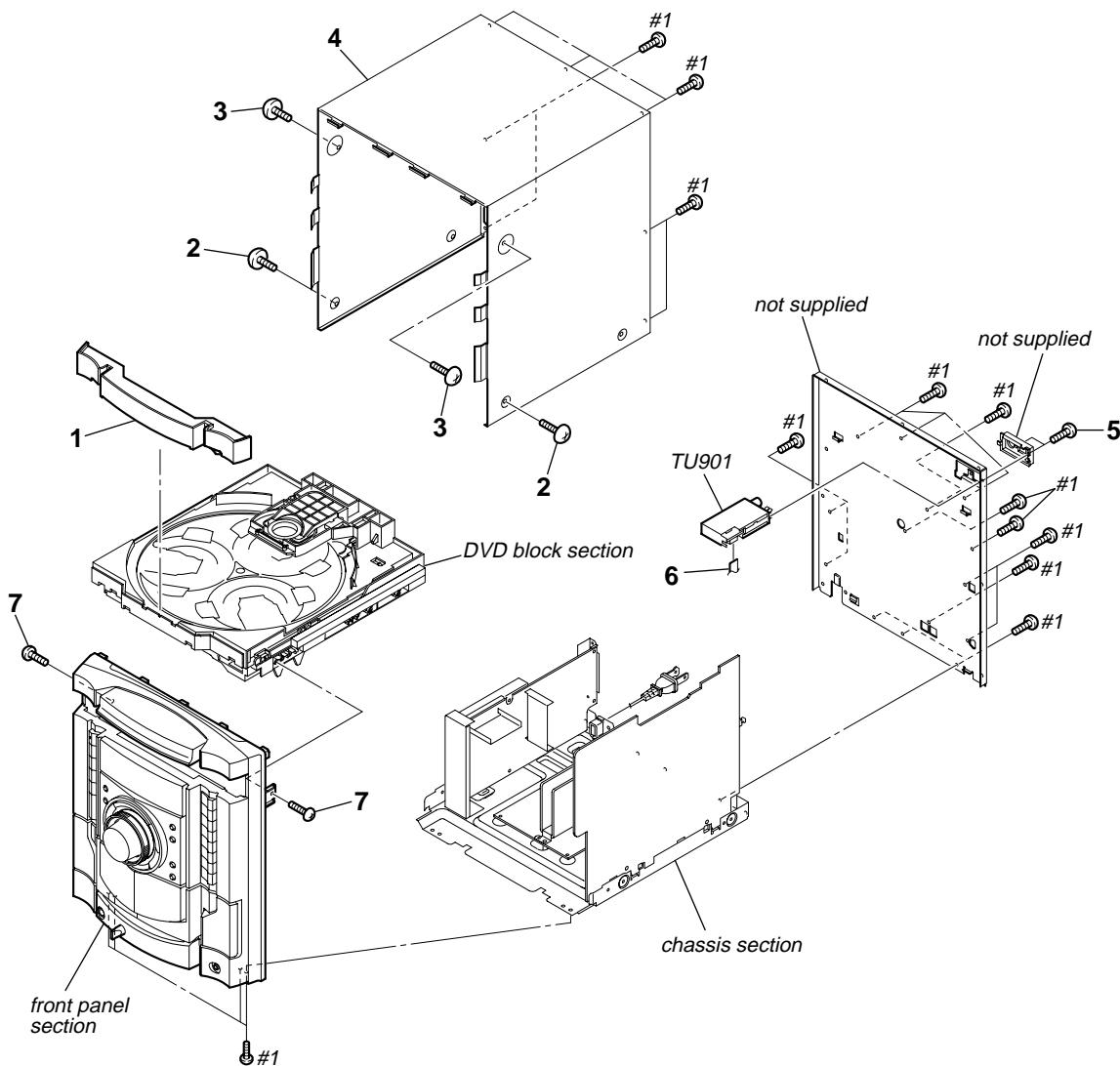
### EXPLODED VIEWS

**NOTE:**

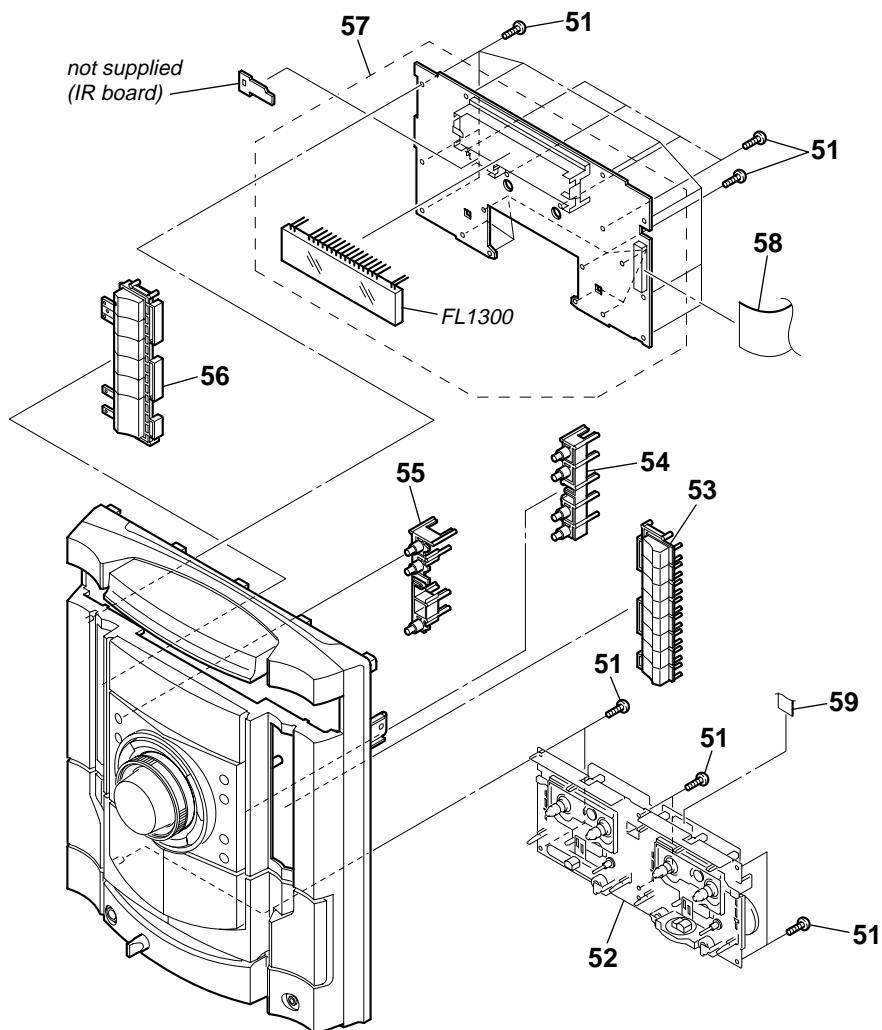
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Accessories are given in the last of this parts list.

• Abbreviation  
 E3 : 240 V AC area in E model  
 E12 : 220-240 V AC area in E model  
 E13 : 220-230 V AC area in E model  
 E15 : Iran model  
 EA : Saudi Arabia model  
 MY : Malaysia model  
 PH : Philippine model  
 SP : Singapore model  
 TH : Thai model

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

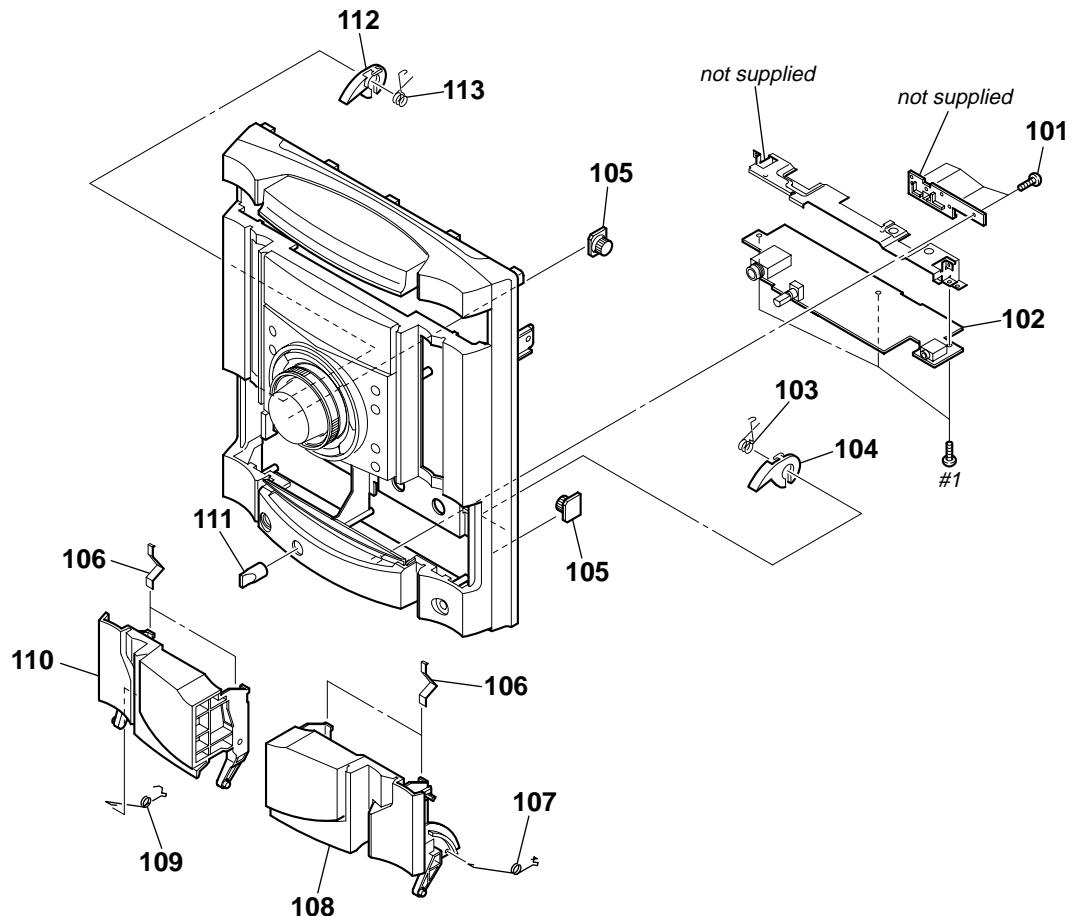
**7-1. MAIN SECTION**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	2-658-345-21	PANEL, LOADING		6	1-828-955-11	WIRE (FLAT TYPE) (9 CORE)	
2	3-363-099-02	SCREW (CASE 3 TP2)		7	3-703-136-12	SCREW, TAPPING	
3	3-363-099-32	SCREW (CASE 3 TP2)		TU901	1-693-702-11	TUNER (FM/AM) (TM10SE)	
4	4-248-760-71	CASE, CABINET STEEL		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	
5	2-630-050-01	+BVTP 3X6 (SUMITITE)					

**7-2. FRONT PANEL SECTION (1)**


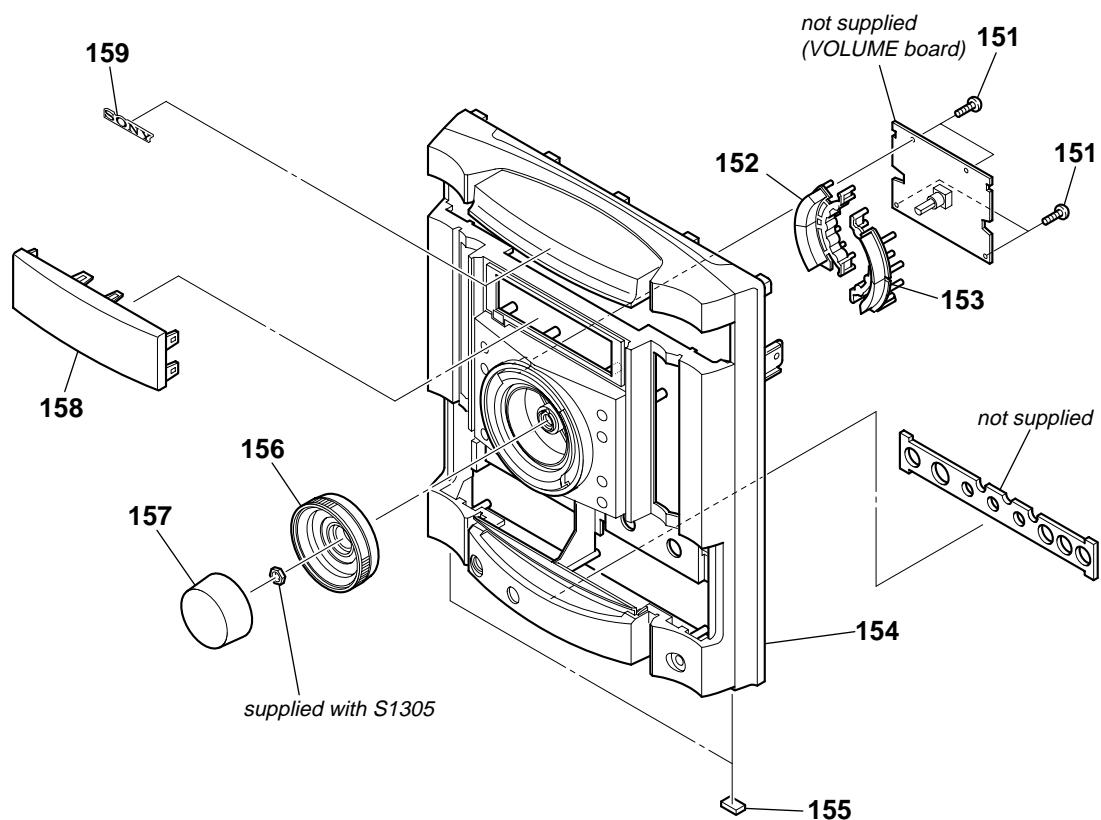
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	3-087-053-01	+BVTP 2.6 (3CR)		56	X-2103-444-1	BUTTON (FUNCTION) ASSY	
52	1-417-657-11	MECHA DECK		57	A-1167-723-A	PANEL BOARD, COMPLETE	
53	2-658-347-11	BUTTON (DISC)		58	1-829-030-11	WIRE (FLAT TYPE) (25 CORE)	
54	2-658-348-11	BUTTON (REC)		59	1-827-720-11	WIRE (FLAT TYPE) (11 CORE)	
55	2-658-349-11	BUTTON (DISPLAY)		FL1300	1-519-859-11	VACUUM FLUORESCENT DISPLAY	

## 7-3. FRONT PANEL SECTION (2)



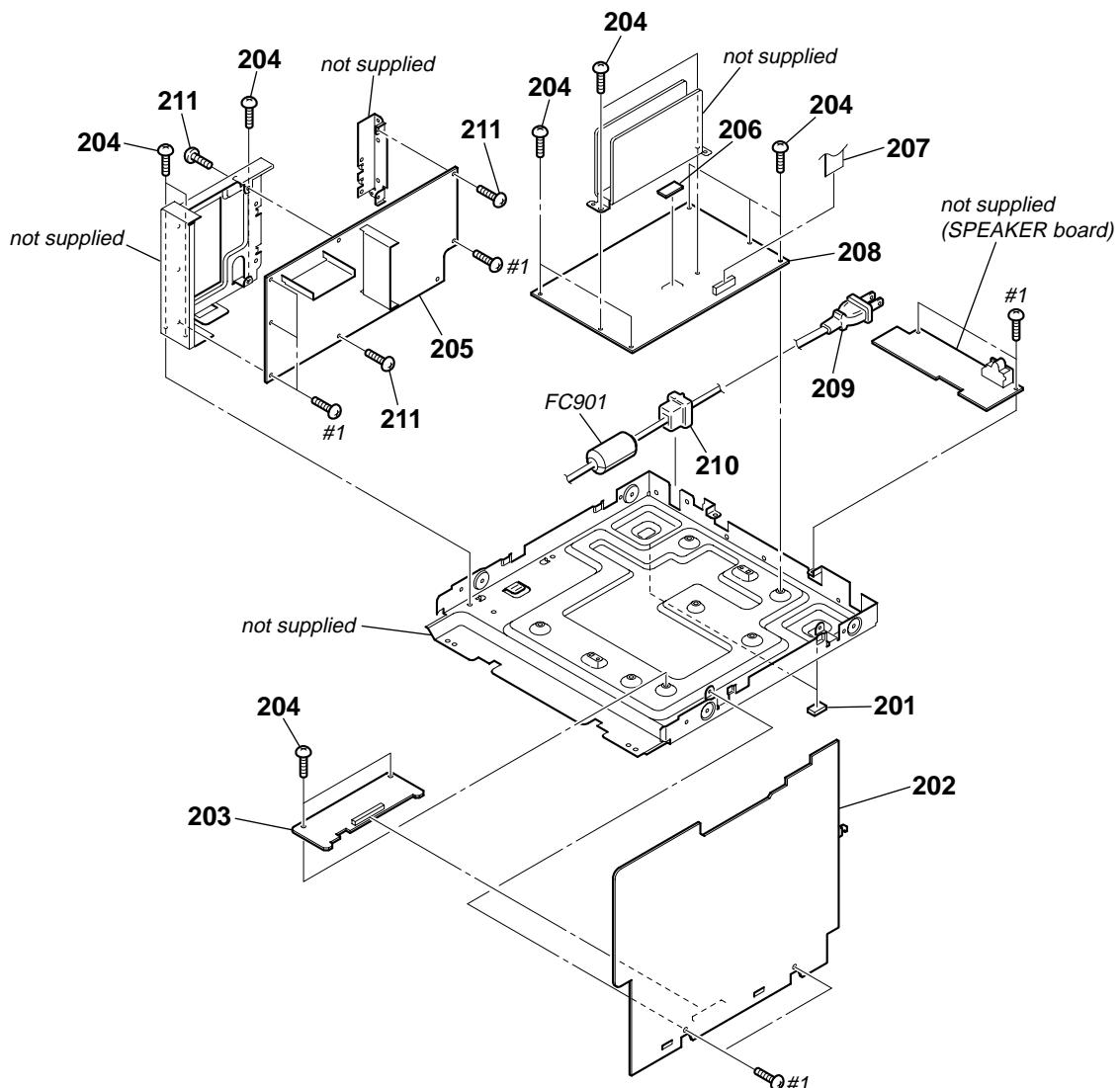
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-087-053-01	+BVTP 2.6 (3CR)		108	2-658-356-11	HOLDER (TC-R)	
102	A-1167-725-A	MIC BOARD, COMPLETE		109	2-658-367-01	SPRING (L)	
103	4-231-841-01	SPRING (HEART CAM-B)		110	2-658-355-11	HOLDER (TC-L)	
104	4-231-825-01	CAM (B), HEART		111	4-238-628-31	KNOB (MIC)	
105	4-224-104-41	DAMPER		112	4-231-824-01	CAM (A), HEART	
106	4-238-631-01	SPRING, TAPE		113	4-231-836-01	SPRING (HEART CAM-A)	
107	2-658-368-01	SPRING (R)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	

## 7-4. FRONT PANEL SECTION (3)



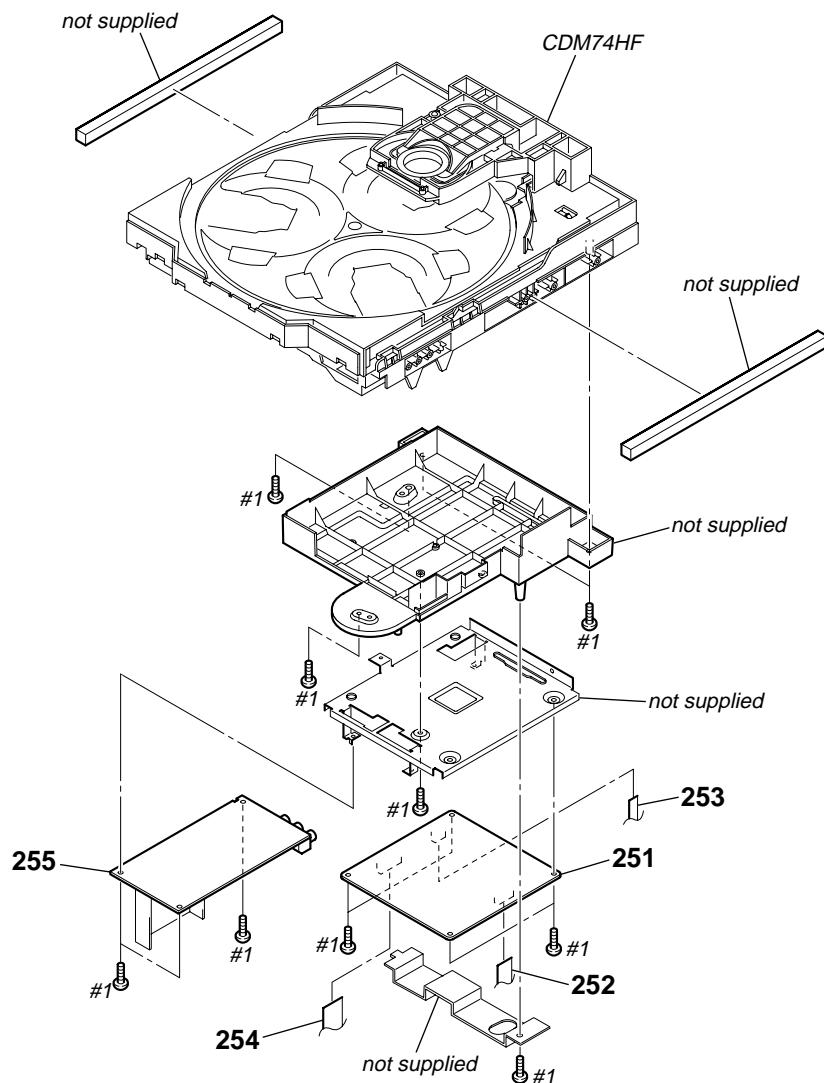
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-087-053-01	+BVTP 2.6 (3CR)		156	X-2103-595-1	KNOB JOG ASSY	
152	2-658-354-01	BUTTON (EQ)		157	2-590-671-01	KNOB (VOL)	
153	2-659-548-11	BUTTON (EQ2)		158	2-658-350-01	WINDOW (FL)	
154	2-658-343-21	PANEL, FRONT		159	4-217-485-21	EMBLEM (5-A), SONY	
155	4-225-252-01	CUSHION (FOOT)					

## 7-5. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	4-225-252-01	CUSHION (FOOT)		▲205	1-479-627-11	POWER UNIT	
202	A-1159-563-A	MAIN BOARD, COMPLETE (E3)		206	2-597-972-31	SHEET, RADIATION	
202	A-1189-052-A	MAIN BOARD, COMPLETE (PH)		207	1-828-985-11	WIRE (FLAT TYPE) (15 CORE)	
202	A-1189-055-A	MAIN BOARD, COMPLETE (MY,SP)		208	A-1164-101-A	S-MASTER BOARD, COMPLETE	
202	A-1189-058-A	MAIN BOARD, COMPLETE (EA)		▲209	1-824-642-21	CORD, POWER (WITH CONNECTOR) (TH)	
202	A-1189-061-A	MAIN BOARD, COMPLETE (E12)		▲209	1-830-188-11	CORD, POWER (EXCEPT TH)	
202	A-1189-064-A	MAIN BOARD, COMPLETE (E15)		210	3-703-244-00	BUSHING (2104), CORD	
202	A-1189-067-A	MAIN BOARD, COMPLETE (E13)		211	3-703-136-12	SCREW, TAPPING	
202	A-1189-077-A	MAIN BOARD, COMPLETE (TH)		FC901	1-500-497-11	FILTER, CLAMP (FERRITE CORE)	
203	A-1164-103-A	ADC BOARD, COMPLETE		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	
204	2-630-050-01	+BVTT 3X6 (SUMITITE)					

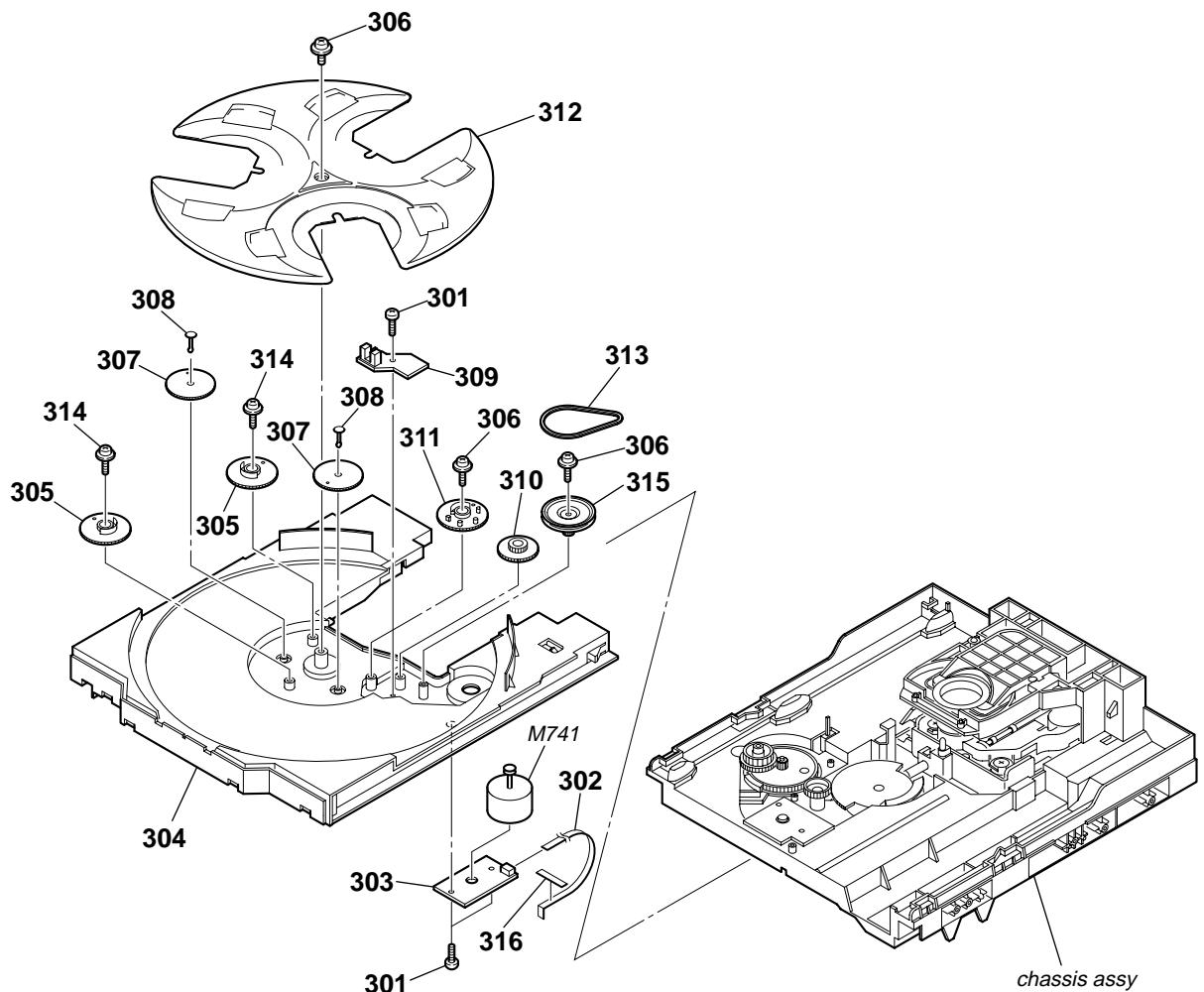
## 7-6. DVD BLOCK SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
☆251	A-1167-778-A	DMB15 BOARD, COMPLETE (E3,E12,E13,E15,EA)		253	1-828-286-11	WIRE (FLAT TYPE) (5 CORE)	
☆251	A-1168-857-A	DMB15 BOARD, COMPLETE (MY,SP,PH,TH)		254	1-828-614-11	WIRE (FLAT TYPE) (17 CORE)	
252	1-828-589-11	WIRE (FLAT TYPE) (13 CORE)		255	A-1164-023-A	VIDEO BOARD, COMPLETE	
				#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)	

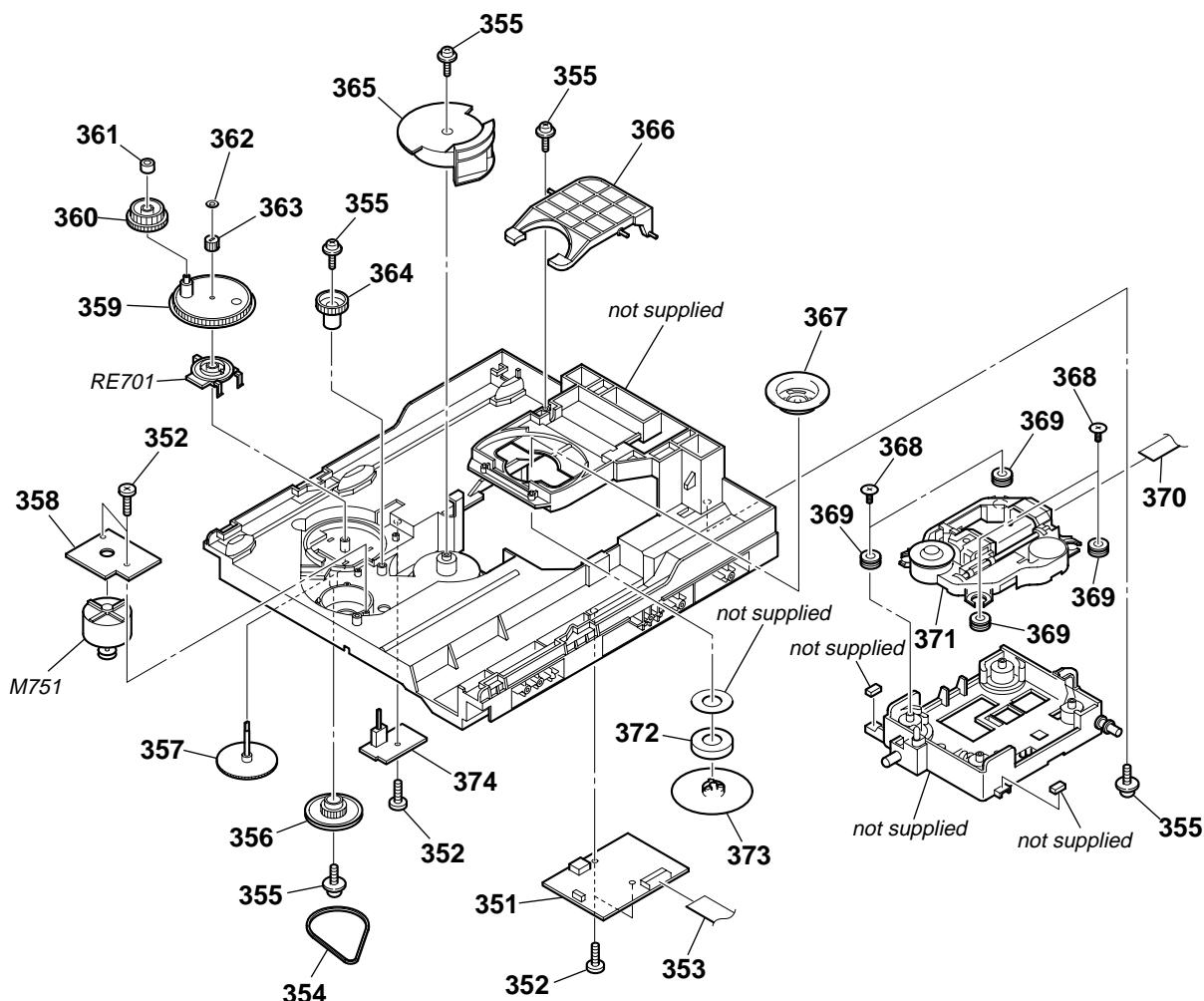
☆ New part of EEPROM (IC103) on the DMB15 board cannot be used.  
Therefore, if the mounted DMB15 board (A-1167-778-A, etc.) is replaced,  
exchange new EEPROM (IC103) with that used before the replacement.

## 7-7. DVD MECHANISM DECK SECTION (1)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	4-218-253-62	SCREW (M2.6), +BTTP		310	4-243-820-01	GEAR (TABLE)	
302	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)		311	4-243-819-01	GEAR (GENEVA)	
303	1-687-134-12	MOTOR (TB) BOARD		312	4-243-816-21	TRAY	
304	4-243-815-11	TABLE (LOADING)		313	4-243-823-01	BELT (TABLE)	
305	4-245-571-02	GEAR (STOPPER)		314	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
306	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		315	4-243-821-01	PULLEY (TABLE)	
307	4-245-570-01	GEAR (JOINT)		316	3-231-598-01	SHEET (BA)	
308	4-245-572-01	BUSHING (GEAR)		M741	A-1108-965-A	MOTOR ASSY, TABLE (TABLE)	
309	1-687-132-12	SENSOR BOARD					

## **7-8. DVD MECHANISM DECK SECTION (2)**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	A-1103-756-B	DRIVER BOARD, COMPLETE		365	4-243-818-01	GEAR (U/D)	
352	4-218-253-52	SCREW (M2.6), +BTTP		366	2-541-918-01	LEVER (LIFTER (H))	
353	1-828-973-11	WIRE (FLAT TYPE) (13 CORE)		367	2-345-983-01	PULLEY B (310), CHUCKING	
354	4-244-034-01	BELT (LOADING)		368	3-087-599-01	SCREW, INSULATOR	
355	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING		369	2-634-618-01	INSULATOR	
356	4-225-844-01	GEAR (LOADING A)		370	1-828-252-51	WIRE (FLAT TYPE) (24 CORE)	
357	4-224-613-01	GEAR (SHAFT)		△371	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)	
358	1-687-133-12	MOTOR (LD) BOARD		372	4-251-923-01	YODE (310)	
359	4-244-108-01	GEAR, SWING		373	2-345-982-01	PULLEY A (310), CHUCKING	
360	4-224-609-01	GEAR (LOADING C)		374	1-687-669-12	SW BOARD	
361	4-224-608-01	COLLAR, SWING		M751	A-1108-966-A	MOTOR ASSY, LOADING (LOADING)	
362	3-016-533-11	WASHER (FR), STOPPER		RE701	1-477-680-12	ENCODER, ROTARY	
363	4-224-611-01	GEAR (LOADING B)				(DISC TRAY ADDRESS DETECT)	
364	4-224-606-01	GEAR (RV)					

## SECTION 8

### ELECTRICAL PARTS LIST

ADC

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- **RESISTORS**  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable
- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- **SEMICONDUCTORS**  
In each case,  $\mu$  :  $\mu$ , for example:  
 $\mu A..$  :  $\mu A..$     $\mu PA..$  :  $\mu PA..$   
 $\mu PB..$  :  $\mu PB..$     $\mu PC..$  :  $\mu PC..$     $\mu PD..$  :  $\mu PD..$
- **CAPACITORS**  
 $\mu F$  :  $\mu F$
- **COILS**  
 $\mu H$  :  $\mu H$

When indicating parts by reference number, please include the board.

- **Abbreviation**
  - E3 : 240 V AC area in E model
  - E12 : 220-240 V AC area in E model
  - E13 : 220-230 V AC area in E model
  - E15 : Iran model
  - EA : Saudi Arabia model
  - MY : Malaysia model
  - PH : Philippine model
  - SP : Singapore model
  - TH : Thai model

The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

Ref. No.	Part No.	Description					Remark	Ref. No.	Part No.	Description					Remark
	A-1164-103-A	ADC BOARD, COMPLETE					*****			< GROUND TERMINAL >					
		< CAPACITOR >						EP1	1-537-738-21	TERMINAL, GROUND					
								EP2	1-537-738-21	TERMINAL, GROUND					
C20	1-126-956-11	ELECT	0.1uF	20%	50V					< FILTER >					
C22	1-104-658-11	ELECT	100uF	20%	10V			FL1	1-234-177-21	FILTER, CHIP EMI					
C23	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V			FL2	1-234-177-21	FILTER, CHIP EMI					
C24	1-104-658-11	ELECT	100uF	20%	10V					< IC >					
C25	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V			IC1	8-759-473-95	IC uPC2905T-E1					
C26	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V			IC2	8-759-583-47	IC uPC2933T-E2					
C27	1-126-963-11	ELECT	4.7uF	20%	50V			IC3	8-759-387-77	IC TC7WU04F(TE12R)					
C28	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V			IC11	6-707-608-01	IC PCM1803DBR					
C29	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V					< JUMPER RESISTOR >					
C32	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V			JR51	1-216-806-11	METAL CHIP	56	5%	1/10W		
C40	1-164-156-11	CERAMIC CHIP	0.1uF		25V			JR52	1-216-806-11	METAL CHIP	56	5%	1/10W		
C41	1-164-156-11	CERAMIC CHIP	0.1uF		25V					< COIL >					
C42	1-164-156-11	CERAMIC CHIP	0.1uF		25V			L1	1-412-939-11	INDUCTOR	1uH				
C50	1-164-156-11	CERAMIC CHIP	0.1uF		25V			L2	1-412-951-11	INDUCTOR	10uH				
C51	1-126-964-11	ELECT	10uF	20%	50V			L3	1-412-951-11	INDUCTOR	10uH				
C53	1-104-658-11	ELECT	100uF	20%	10V					< TRANSISTOR >					
C54	1-164-156-11	CERAMIC CHIP	0.1uF		25V			Q7	6-550-889-01	TRANSISTOR	2SC5938-T112-1B				
C55	1-126-964-11	ELECT	10uF	20%	50V			Q8	6-550-889-01	TRANSISTOR	2SC5938-T112-1B				
C56	1-164-156-11	CERAMIC CHIP	0.1uF		25V					< RESISTOR >					
C57	1-126-964-11	ELECT	10uF	20%	50V			R25	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		
C58	1-164-156-11	CERAMIC CHIP	0.1uF		25V			R27	1-216-845-11	METAL CHIP	100K	5%	1/10W		
C59	1-126-960-11	ELECT	1uF	20%	50V			R28	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C60	1-126-960-11	ELECT	1uF	20%	50V			R29	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		
C81	1-107-726-11	CERAMIC CHIP	0.01uF	10%	16V			R31	1-216-845-11	METAL CHIP	100K	5%	1/10W		
C90	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V										
C91	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V			R32	1-216-821-11	METAL CHIP	1K	5%	1/10W		
		< CONNECTOR >						R36	1-216-864-11	SHORT CHIP	0				
CN1	1-766-720-41	CONNECTOR, BOARD TO BOARD 17P						R38	1-216-864-11	SHORT CHIP	0				
		< DIODE >						R40	1-216-821-11	METAL CHIP	1K	5%	1/10W		
D11	8-719-988-61	DIODE	1SS355TE-17					R41	1-216-857-11	METAL CHIP	1M	5%	1/10W		
D12	8-719-988-61	DIODE	1SS355TE-17					R50	1-216-864-11	SHORT CHIP	0				
D13	8-719-988-61	DIODE	1SS355TE-17					R52	1-216-809-11	METAL CHIP	100	5%	1/10W		
D14	8-719-988-61	DIODE	1SS355TE-17					R53	1-216-809-11	METAL CHIP	100	5%	1/10W		
D51	8-719-988-61	DIODE	1SS355TE-17					R55	1-216-864-11	SHORT CHIP	0				
D52	8-719-988-61	DIODE	1SS355TE-17					R58	1-216-864-11	SHORT CHIP	0				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R59	1-216-864-11	SHORT CHIP	0	C156	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R67	1-216-864-11	SHORT CHIP	0	C158	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
< VIBRATOR >				C159	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
X1	1-795-843-11	VIBRATOR, CRYSTAL (12.288MHz)		C160	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
*****							
☆	A-1167-778-A	DMB15 BOARD, COMPLETE (E3,E12,E13,E15,EA)		C161	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
☆	A-1188-857-A	DMB15 BOARD, COMPLETE (MY,SP,PH,TH)		C162	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
*****							
< CAPACITOR >				C163	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C101	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C164	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C102	1-125-837-11	CERAMIC CHIP	1uF 10% 6.3V	C167	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C105	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	C170	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C106	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C171	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C108	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C172	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C109	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C173	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C112	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	C174	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C113	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C175	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C114	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C176	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C115	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C177	1-126-205-11	ELECT CHIP	47uF 20% 6.3V
C116	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C178	1-126-208-21	ELECT CHIP	47uF 20% 4V
C117	1-124-779-00	ELECT CHIP	10uF 20% 16V	C179	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C118	1-124-779-00	ELECT CHIP	10uF 20% 16V	C180	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C119	1-124-779-00	ELECT CHIP	10uF 20% 16V	C181	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C120	1-165-908-11	CERAMIC CHIP	1uF 10% 10V	C182	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V
C121	1-165-908-11	CERAMIC CHIP	1uF 10% 10V	C184	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C122	1-165-908-11	CERAMIC CHIP	1uF 10% 10V	C187	1-126-208-21	ELECT CHIP	47uF 20% 4V
C123	1-165-908-11	CERAMIC CHIP	1uF 10% 10V	C188	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V
C124	1-165-908-11	CERAMIC CHIP	1uF 10% 10V	C189	1-128-934-11	CERAMIC CHIP	0.33uF 20% 10V
C125	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C190	1-126-205-11	ELECT CHIP	47uF 20% 6.3V
C126	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C191	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C127	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C192	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C128	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V	C193	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V
C129	1-124-779-00	ELECT CHIP	10uF 20% 16V	C195	1-127-715-11	CERAMIC CHIP	0.22uF 10% 16V
C130	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C196	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C131	1-125-838-11	CERAMIC CHIP	2.2uF 10% 6.3V	C203	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C132	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C205	1-164-230-11	CERAMIC CHIP	220PF 5% 50V
C133	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C206	1-164-230-11	CERAMIC CHIP	220PF 5% 50V
C135	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V	C208	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C136	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C209	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V
C137	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C210	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C138	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C211	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V
C139	1-162-919-11	CERAMIC CHIP	22PF 5% 50V	C212	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C140	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C213	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C144	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C214	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C146	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C215	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C147	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C217	1-126-204-11	ELECT CHIP	47uF 20% 16V
C148	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C218	1-124-779-00	ELECT CHIP	10uF 20% 16V
C149	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C219	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C150	1-124-779-00	ELECT CHIP	10uF 20% 16V	C220	1-124-779-00	ELECT CHIP	10uF 20% 16V
C151	1-115-416-11	CERAMIC CHIP	0.001uF 5% 25V	C221	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C152	1-162-916-11	CERAMIC CHIP	12PF 5% 50V	C222	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V
C153	1-162-916-11	CERAMIC CHIP	12PF 5% 50V	C224	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C154	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C233	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C155	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C301	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C302	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V
				C305	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V
				C306	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
				C307	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
				C308	1-107-725-11	CERAMIC CHIP	0.1uF 10% 16V
				C402	1-126-204-11	ELECT CHIP	47uF 20% 16V

☆ New part of EEPROM (IC103) on the DMB15 board cannot be used.  
Therefore, if the mounted DMB15 board (A-1167-778-A, etc.) is replaced,  
exchange new EEPROM (IC103) with that used before the replacement.

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark	
C403	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	FL105	1-234-177-21	FILTER, CHIP EMI		
C3701	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FL106	1-234-177-21	FILTER, CHIP EMI		
C3702	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FL107	1-234-177-21	FILTER, CHIP EMI		
C3707	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FL108	1-234-177-21	FILTER, CHIP EMI		
C3708	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FL401	1-234-177-21	FILTER, CHIP EMI		
C3711	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V	FL402	1-233-893-21	FILTER, CHIP EMI		
C3712	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	FL403	1-234-177-21	FILTER, CHIP EMI		
C3713	1-162-961-11	CERAMIC CHIP	330PF	10%	50V			< IC >		
C3714	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	IC101	6-806-351-01	IC MX29LV320CBTC70-CBA4-0601CE (E3,E12,E13,E15,EA)		
C3721	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V	IC101	6-806-352-01	IC MX29LV320CBTC70-CBA4-0601GA (MY,SP,PH,TH)		
C3722	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	IC102	6-707-535-01	IC CXD9849R		
C3723	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	☆IC103	not supplied	IC BR24L64F-WE2		
C3724	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	IC104	6-709-370-01	IC A2V64S40CTP-G75		
C3773	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	IC105	6-702-302-01	IC TK11133CSCL-G		
C3774	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	IC106	6-708-153-01	IC PQ018EN01ZPH		
C3781	1-162-977-11	CERAMIC CHIP	0.0018uF	10%	50V	IC107	6-702-302-01	IC TK11133CSCL-G		
C3782	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	IC201	6-704-524-01	IC FAN8036L		
C3783	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	IC301	6-704-222-01	IC AK4358VQ-L		
C3784	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	IC3711	8-759-359-49	IC NJM3414AV(TE2)		
C3801	1-126-206-11	ELECT CHIP	100uF	20%	6.3V	IC3771	8-759-359-49	IC NJM3414AV(TE2)		
C3802	1-117-370-11	CERAMIC CHIP	10uF		10V			< TRANSISTOR >		
C3803	1-126-209-11	ELECT CHIP	100uF	20%	4V					
C3804	1-126-205-11	ELECT CHIP	47uF	20%	6.3V					
C3805	1-126-208-21	ELECT CHIP	47uF	20%	4V	Q101	6-550-008-01	TRANSISTOR UM6K1N-TN		
		< CONNECTOR >			Q102	6-550-653-01	TRANSISTOR QST8TR			
					Q103	8-729-027-52	TRANSISTOR DTC124EKA-T146			
					Q3801	8-729-230-49	TRANSISTOR 2SC2712-YG			
							< RESISTOR >			
* CN101	1-815-763-32	CONNECTOR, FFC/FPC 24P			R101	1-216-809-11	METAL CHIP	100	5%	1/10W
* CN105	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P			R104	1-216-864-11	SHORT CHIP	0		
CN106	1-793-989-21	CONNECTOR, FFC/FPC 13P			R105	1-216-833-11	METAL CHIP	10K	5%	1/10W
* CN201	1-770-470-21	PIN, CONNECTOR (PC BOARD) 6P			R106	1-216-833-11	METAL CHIP	10K	5%	1/10W
CN301	1-784-365-21	CONNECTOR, FFC/FPC 5P			R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
CN302	1-784-376-11	CONNECTOR, FFC/FPC 17P			R108	1-216-857-11	METAL CHIP	1M	5%	1/10W
CN401	1-779-993-11	PIN, CONNECTOR (PWB) 5P			R109	1-216-864-11	SHORT CHIP	0		
		< DIODE >			R110	1-216-841-11	METAL CHIP	47K	5%	1/10W
D1001	8-719-058-24	DIODE RB501V-40TE-17			R111	1-216-809-11	METAL CHIP	100	5%	1/10W
D3501	8-719-988-61	DIODE ISS355TE-17			R112	1-211-977-11	METAL CHIP	22	0.5%	1/10W
D3502	8-719-988-61	DIODE ISS355TE-17			R113	1-211-977-11	METAL CHIP	22	0.5%	1/10W
		< FERRITE BEAD >			R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
FB111	1-414-226-21	INDUCTOR, FERRITE BEAD			R115	1-211-977-11	METAL CHIP	22	0.5%	1/10W
FB112	1-414-226-21	INDUCTOR, FERRITE BEAD			R116	1-216-821-11	METAL CHIP	1K	5%	1/10W
FB113	1-414-226-21	INDUCTOR, FERRITE BEAD			R117	1-216-841-11	METAL CHIP	47K	5%	1/10W
FB114	1-414-226-21	INDUCTOR, FERRITE BEAD			R118	1-216-801-11	METAL CHIP	22	5%	1/10W
FB115	1-414-226-21	INDUCTOR, FERRITE BEAD			R120	1-216-801-11	METAL CHIP	22	5%	1/10W
FB401	1-469-324-21	FERRITE, EMI (SMD) (2012)			R121	1-216-801-11	METAL CHIP	22	5%	1/10W
FB402	1-469-324-21	FERRITE, EMI (SMD) (2012)			R123	1-216-864-11	SHORT CHIP	0		
FB403	1-469-324-21	FERRITE, EMI (SMD) (2012)			R124	1-216-841-11	METAL CHIP	47K	5%	1/10W
FB404	1-469-324-21	FERRITE, EMI (SMD) (2012)			R126	1-216-864-11	SHORT CHIP	0		
FB405	1-469-324-21	FERRITE, EMI (SMD) (2012)			R127	1-216-809-11	METAL CHIP	100	5%	1/10W
FB406	1-469-324-21	FERRITE, EMI (SMD) (2012)			R136	1-216-835-11	METAL CHIP	15K	5%	1/10W
		< FILTER >			R138	1-216-845-11	METAL CHIP	100K	5%	1/10W
FL101	1-234-177-21	FILTER, CHIP EMI			R141	1-218-916-11	METAL CHIP	750K	0.5%	1/10W
FL104	1-234-177-21	FILTER, CHIP EMI			R142	1-216-845-11	METAL CHIP	100K	5%	1/10W
					R143	1-216-809-11	METAL CHIP	100	5%	1/10W

- ★ New part of EEPROM (IC103) on the DMB15 board cannot be used. Therefore, if the mounted DMB15 board (A-1167-778-A, etc.) is replaced, exchange new EEPROM (IC103) with that used before the replacement.

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**DMB15**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R146	1-216-805-11	METAL CHIP	47 5% 1/10W	R1133	1-216-864-11	SHORT CHIP	0
R151	1-216-805-11	METAL CHIP	47 5% 1/10W	R1134	1-216-864-11	SHORT CHIP	0
R152	1-216-864-11	SHORT CHIP	0	R1150	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R153	1-216-805-11	METAL CHIP	47 5% 1/10W	R1151	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R155	1-216-805-11	METAL CHIP	47 5% 1/10W	R1152	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R160	1-216-805-11	METAL CHIP	47 5% 1/10W	R1168	1-216-817-11	METAL CHIP	470 5% 1/10W
R161	1-216-809-11	METAL CHIP	100 5% 1/10W	R1502	1-216-864-11	SHORT CHIP	0
R164	1-216-809-11	METAL CHIP	100 5% 1/10W	R1504	1-400-244-11	BEAD, FERRITE (CHIP) (1608)	
R169	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1524	1-414-226-21	INDUCTOR, FERRITE BEAD	
R187	1-216-864-11	SHORT CHIP	0	R1526	1-414-226-21	INDUCTOR, FERRITE BEAD	
R189	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R1528	1-216-833-11	METAL CHIP	10K 5% 1/10W
R190	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R1530	1-216-864-11	SHORT CHIP	0
R191	1-216-821-11	METAL CHIP	1K 5% 1/10W	R1531	1-216-864-11	SHORT CHIP	0
R192	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R1540	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R193	1-216-821-11	METAL CHIP	1K 5% 1/10W	R1542	1-216-833-11	METAL CHIP	10K 5% 1/10W
R195	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R1544	1-216-864-11	SHORT CHIP	0
R196	1-216-864-11	SHORT CHIP	0	R1546	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R197	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R1547	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R204	1-216-822-11	METAL CHIP	1.2K 5% 1/10W	R1548	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R205	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1549	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R206	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1550	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R207	1-216-826-11	METAL CHIP	2.7K 5% 1/10W	R1551	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R208	1-216-839-11	METAL CHIP	33K 5% 1/10W	R1552	1-216-833-11	METAL CHIP	10K 5% 1/10W
R209	1-216-839-11	METAL CHIP	33K 5% 1/10W	R1553	1-216-864-11	SHORT CHIP	0
R210	1-216-841-11	METAL CHIP	47K 5% 1/10W	R1554	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R212	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1557	1-216-809-11	METAL CHIP	100 5% 1/10W
R213	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R1558	1-216-833-11	METAL CHIP	10K 5% 1/10W
R214	1-216-835-11	METAL CHIP	15K 5% 1/10W	R2504	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R215	1-216-834-11	METAL CHIP	12K 5% 1/10W	R3501	1-216-864-11	SHORT CHIP	0
R216	1-216-834-11	METAL CHIP	12K 5% 1/10W	R3651	1-216-864-11	SHORT CHIP	0
R219	1-216-838-11	METAL CHIP	27K 5% 1/10W	R3652	1-216-864-11	SHORT CHIP	0
R220	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3653	1-216-864-11	SHORT CHIP	0
R221	1-218-889-11	METAL CHIP	56K 0.5% 1/10W	R3711	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R223	1-218-895-11	METAL CHIP	100K 0.5% 1/10W	R3712	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R224	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3713	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R225	1-218-895-11	METAL CHIP	100K 0.5% 1/10W	R3714	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R226	1-218-889-11	METAL CHIP	56K 0.5% 1/10W	R3715	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R230	1-218-893-11	METAL CHIP	82K 0.5% 1/10W	R3716	1-216-821-11	METAL CHIP	1K 5% 1/10W
R231	1-218-875-11	METAL CHIP	15K 0.5% 1/10W	R3717	1-216-821-11	METAL CHIP	1K 5% 1/10W
R232	1-218-877-11	METAL CHIP	18K 0.5% 1/10W	R3718	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R233	1-218-883-11	METAL CHIP	33K 0.5% 1/10W	R3719	1-216-821-11	METAL CHIP	1K 5% 1/10W
R234	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3721	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R246	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R3722	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R247	1-216-821-11	METAL CHIP	1K 5% 1/10W	R3723	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R314	1-216-809-11	METAL CHIP	100 5% 1/10W	R3724	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R319	1-216-864-11	SHORT CHIP	0	R3725	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1101	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R3726	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1102	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R3727	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1103	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3728	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1104	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3729	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1105	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3771	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R1108	1-216-864-11	SHORT CHIP	0	R3772	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R1109	1-216-864-11	SHORT CHIP	0	R3773	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R1110	1-216-826-11	METAL CHIP	2.7K 5% 1/10W	R3774	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R1123	1-216-864-11	SHORT CHIP	0	R3775	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1124	1-216-864-11	SHORT CHIP	0	R3776	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1125	1-216-864-11	SHORT CHIP	0	R3777	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1129	1-216-845-11	METAL CHIP	100K 5% 1/10W	R3778	1-216-829-11	METAL CHIP	4.7K 5% 1/10W



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## MAIN

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark		
C104	1-126-964-11	ELECT	10uF	20%	50V	C172	1-126-964-11	ELECT	10uF	20%	50V
C105	1-126-964-11	ELECT	10uF	20%	50V	C173	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C106	1-115-412-11	CERAMIC CHIP	680PF	5%	25V	C174	1-162-928-11	CERAMIC CHIP	120PF	5%	50V
C107	1-136-497-81	FILM	0.1uF	5%	50V	C175	1-162-959-11	CERAMIC CHIP	330PF	5%	50V
C108	1-104-700-11	CERAMIC CHIP	0.027uF	10%	16V	C176	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C109	1-104-700-11	CERAMIC CHIP	0.027uF	10%	16V	C177	1-137-194-81	FILM	0.47uF	5%	50V
C110	1-126-964-11	ELECT	10uF	20%	50V	C178	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-135-995-11	CERAMIC CHIP	0.039uF	10%	25V	C179	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C112	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V	C180	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C113	1-126-964-11	ELECT	10uF	20%	50V	C184	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C114	1-137-194-81	FILM	0.47uF	5%	50V	C185	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C115	1-137-194-81	FILM	0.47uF	5%	50V	C186	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C116	1-126-963-11	ELECT	4.7uF	20%	50V	C187	1-104-658-11	ELECT	100uF	20%	10V
C118	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	C188	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V
C119	1-126-964-11	ELECT	10uF	20%	50V	C189	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C120	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C190	1-162-957-11	CERAMIC CHIP	220PF	5%	50V
C121	1-126-960-11	ELECT	1uF	20%	50V	C191	1-137-190-11	FILM	0.22uF	5%	50V
C122	1-126-964-11	ELECT	10uF	20%	50V	C192	1-126-960-11	ELECT	1uF	20%	50V
C123	1-162-957-11	CERAMIC CHIP	220PF	5%	50V	C193	1-137-190-11	FILM	0.22uF	5%	50V
C124	1-162-928-11	CERAMIC CHIP	120PF	5%	50V	C194	1-126-964-11	ELECT	10uF	20%	50V
C125	1-162-959-11	CERAMIC CHIP	330PF	5%	50V	C195	1-126-960-11	ELECT	1uF	20%	50V
C126	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C197	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C130	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V	C198	1-126-961-11	ELECT	2.2uF	20%	50V
C132	1-126-933-11	ELECT	100uF	20%	16V	C199	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C133	1-126-960-11	ELECT	1uF	20%	50V	C200	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C134	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C201	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C135	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C202	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C136	1-126-933-11	ELECT	100uF	20%	16V	C203	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C137	1-126-935-11	ELECT	470uF	20%	16V	C204	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C138	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C213	1-136-497-81	FILM	0.1uF	5%	50V
C139	1-137-150-11	FILM	0.01uF	5%	100V	C214	1-136-497-81	FILM	0.1uF	5%	50V
C140	1-126-947-11	ELECT	47uF	20%	35V	C215	1-126-964-11	ELECT	10uF	20%	50V
C141	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C216	1-136-497-81	FILM	0.1uF	5%	50V
C142	1-130-481-00	MYLAR	0.0068uF	5%	50V	C226	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C144	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C228	1-162-953-11	CERAMIC CHIP	100PF	5%	50V
C145	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C230	1-126-961-11	ELECT	2.2uF	20%	50V
C147	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C234	1-126-926-11	ELECT	1000uF	20%	10V
C148	1-126-961-11	ELECT	2.2uF	20%	50V	C235	1-216-864-11	SHORT CHIP	0		
C150	1-126-964-11	ELECT	10uF	20%	50V	C238	1-126-964-11	ELECT	10uF	20%	50V
C151	1-126-964-11	ELECT	10uF	20%	50V	C239	1-126-964-11	ELECT	10uF	20%	50V
C152	1-126-964-11	ELECT	10uF	20%	50V	C288	1-126-964-11	ELECT	10uF	20%	50V
C153	1-126-964-11	ELECT	10uF	20%	50V	C289	1-126-964-11	ELECT	10uF	20%	50V
C154	1-126-964-11	ELECT	10uF	20%	50V	C301	1-126-965-11	ELECT	22uF	20%	50V
C156	1-115-412-11	CERAMIC CHIP	680PF	5%	25V	C302	1-126-965-11	ELECT	22uF	20%	50V
C157	1-136-497-81	FILM	0.1uF	5%	50V	C303	1-126-961-11	ELECT	2.2uF	20%	50V
C158	1-104-700-11	CERAMIC CHIP	0.027uF	10%	16V	C304	1-126-961-11	ELECT	2.2uF	20%	50V
C159	1-104-700-11	CERAMIC CHIP	0.027uF	10%	16V	C307	1-126-961-11	ELECT	2.2uF	20%	50V
C160	1-126-964-11	ELECT	10uF	20%	50V	C308	1-126-961-11	ELECT	2.2uF	20%	50V
C161	1-135-995-11	CERAMIC CHIP	0.039uF	10%	25V	C410	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C162	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V	C411	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C163	1-126-964-11	ELECT	10uF	20%	50V	C412	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C164	1-137-194-81	FILM	0.47uF	5%	50V	C414	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C165	1-137-194-81	FILM	0.47uF	5%	50V	C416	1-126-917-11	ELECT	3300uF	20%	6.3V
C166	1-126-963-11	ELECT	4.7uF	20%	50V	C462	1-104-658-11	ELECT	100uF	20%	10V
C168	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	C464	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C169	1-126-964-11	ELECT	10uF	20%	50V	C486	1-126-935-11	ELECT	470uF	20%	16V
C170	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C496	1-126-964-11	ELECT	10uF	20%	50V
C171	1-126-960-11	ELECT	1uF	20%	50V	C498	1-164-156-11	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
C499	1-164-156-11	CERAMIC CHIP	0.1uF	25V			< FERRITE BEAD >		
C501	1-164-156-11	CERAMIC CHIP	0.1uF	25V			< FERRITE BEAD >		
C502	1-104-658-11	ELECT	100uF	20%	10V	FB101	1-216-864-11	SHORT CHIP	0
C504	1-126-926-11	ELECT	1000uF	20%	10V	FB102	1-469-125-21	FERRITE, EMI (SMD) (1608)	
C532	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FB103	1-216-864-11	SHORT CHIP	0
						FB104	1-469-125-21	FERRITE, EMI (SMD) (1608)	
C539	1-164-156-11	CERAMIC CHIP	0.1uF	25V		FB151	1-216-864-11	SHORT CHIP	0
C550	1-128-547-11	ELECT	6800uF	20%	16V				
C551	1-126-960-11	ELECT	1uF	20%	50V	FB152	1-469-125-21	FERRITE, EMI (SMD) (1608)	
C552	1-126-925-11	ELECT	470uF	20%	10V	FB153	1-216-864-11	SHORT CHIP	0
C553	1-126-960-11	ELECT	1uF	20%	50V	FB513	1-414-235-22	INDUCTOR, FERRITE BEAD	
C554	1-126-925-11	ELECT	470uF	20%	10V	FB514	1-414-235-22	INDUCTOR, FERRITE BEAD	
C555	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	FB515	1-414-235-22	INDUCTOR, FERRITE BEAD	
C556	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V				
C566	1-126-960-11	ELECT	1uF	20%	50V	FB516	1-216-864-11	SHORT CHIP	0
C567	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V				
		< CONNECTOR >							
CN101	1-568-830-11	CONNECTOR, FFC 11P				IC101	6-705-667-01	IC M61537FP-RFOG	
CN105	1-784-776-11	CONNECTOR, FFC 15P				IC401	6-806-202-01	IC M30622MEP-A50FPU0	
CN121	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				IC402	6-701-680-01	IC PST3629NR	
* CN131	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				IC403	6-707-095-01	IC BH2210FV-E2	
CN201	1-784-786-11	CONNECTOR, FFC 25P				IC508	6-600-465-11	IC TOTX147 (DVD DIGITAL OUT)	
		< CONNECTOR >							
CN205	1-785-318-11	PIN, CONNECTOR (STRAIGHT) 6P				IC551	6-703-550-01	IC TA7809LS	
CN301	1-779-281-11	CONNECTOR, FFC (LIF(NON-ZIF)) 13P				IC552	6-703-550-01	IC TA7809LS	
* CN381	1-766-718-21	CONNECTOR, BOARD TO BOARD 17P				IC562	6-703-546-01	IC TA7804LS	
CN405	1-784-774-11	CONNECTOR, FFC 13P							
CN406	1-568-828-11	CONNECTOR, FFC 9P							
		< CONNECTOR >							
CN521	1-779-285-11	CONNECTOR, FFC (LIF(NON-ZIF)) 17P				J506	1-820-048-11	CONNECTOR (LIGHTING) (D-LIGHT SYNC OUT)	
* CN590	1-564-510-11	PLUG, CONNECTOR 7P							
		< JUMPER RESISTOR >							
		< DIODE >							
D101	6-501-193-01	DIODE ISS355WTE-17				JR001	1-216-296-11	SHORT CHIP	0
D102	6-501-193-01	DIODE ISS355WTE-17				JR002	1-216-864-11	SHORT CHIP	0
D104	6-501-193-01	DIODE ISS355WTE-17				JR003	1-216-864-11	SHORT CHIP	0
D134	6-500-522-21	DIODE 10EDB40-TB3				JR004	1-216-864-11	SHORT CHIP	0
D135	6-500-522-21	DIODE 10EDB40-TB3				JR005	1-216-864-11	SHORT CHIP	0
D136	8-719-069-55	DIODE UDVZSTE-175.6B				JR006	1-216-864-11	SHORT CHIP	0
D213	6-501-193-01	DIODE ISS355WTE-17				JR007	1-216-864-11	SHORT CHIP	0
D214	6-501-193-01	DIODE ISS355WTE-17				JR008	1-216-864-11	SHORT CHIP	0
D215	6-501-193-01	DIODE ISS355WTE-17				JR009	1-216-864-11	SHORT CHIP	0
D216	6-501-193-01	DIODE ISS355WTE-17				JR011	1-216-864-11	SHORT CHIP	0
D230	6-501-193-01	DIODE ISS355WTE-17				JR012	1-216-864-11	SHORT CHIP	0
D231	6-501-193-01	DIODE ISS355WTE-17				JR013	1-216-296-11	SHORT CHIP	0
D232	6-501-193-01	DIODE ISS355WTE-17				JR014	1-216-296-11	SHORT CHIP	0
D393	6-501-193-01	DIODE ISS355WTE-17				JR015	1-216-864-11	SHORT CHIP	0
D394	6-501-193-01	DIODE ISS355WTE-17				JR016	1-216-864-11	SHORT CHIP	0
D395	6-501-193-01	DIODE ISS355WTE-17				JR017	1-216-864-11	SHORT CHIP	0
D396	6-501-193-01	DIODE ISS355WTE-17				JR018	1-216-864-11	SHORT CHIP	0
D486	6-501-193-01	DIODE ISS355WTE-17				JR019	1-216-864-11	SHORT CHIP	0
D505	6-501-193-01	DIODE ISS355WTE-17				JR021	1-216-296-11	SHORT CHIP	0
D506	6-501-193-01	DIODE ISS355WTE-17				JR022	1-216-864-11	SHORT CHIP	0
D583	8-719-978-33	DIODE DTZ-TT11-6.8B				JR023	1-216-864-11	SHORT CHIP	0
D594	6-500-522-21	DIODE 10EDB40-TB3				JR026	1-216-864-11	SHORT CHIP	0
						JR027	1-216-864-11	SHORT CHIP	0
						JR028	1-216-864-11	SHORT CHIP	0
						JR029	1-216-864-11	SHORT CHIP	0
						JR030	1-216-864-11	SHORT CHIP	0
						JR031	1-216-864-11	SHORT CHIP	0
						JR032	1-216-864-11	SHORT CHIP	0
						JR033	1-216-864-11	SHORT CHIP	0
						JR036	1-216-864-11	SHORT CHIP	0

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## MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
JR037	1-216-864-11	SHORT CHIP	0	Q122	8-729-903-46	TRANSISTOR	2SB1132-P
JR042	1-216-864-11	SHORT CHIP	0	Q123	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR043	1-216-864-11	SHORT CHIP	0	Q125	8-729-802-80	TRANSISTOR	2SC3661
JR044	1-216-864-11	SHORT CHIP	0	Q131	8-729-056-46	TRANSISTOR	2SC5053T100Q
JR047	1-216-864-11	SHORT CHIP	0	Q132	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR049	1-216-864-11	SHORT CHIP	0	Q133	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR050	1-216-864-11	SHORT CHIP	0	Q151	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R
JR051	1-216-864-11	SHORT CHIP	0	Q153	8-729-802-80	TRANSISTOR	2SC3661
JR052	1-216-864-11	SHORT CHIP	0	Q154	8-729-802-80	TRANSISTOR	2SC3661
JR053	1-216-864-11	SHORT CHIP	0	Q155	8-729-802-80	TRANSISTOR	2SC3661
JR054	1-216-864-11	SHORT CHIP	0	Q166	8-729-802-80	TRANSISTOR	2SC3661
JR055	1-216-296-11	SHORT CHIP	0	Q175	8-729-802-80	TRANSISTOR	2SC3661
JR056	1-216-296-11	SHORT CHIP	0	Q213	8-729-901-00	TRANSISTOR	DTC124EK
JR057	1-216-296-11	SHORT CHIP	0	Q237	8-729-802-80	TRANSISTOR	2SC3661
JR059	1-216-296-11	SHORT CHIP	0	Q238	8-729-802-80	TRANSISTOR	2SC3661
JR125	1-216-864-11	SHORT CHIP	0	Q287	8-729-802-80	TRANSISTOR	2SC3661
JR152	1-216-296-11	SHORT CHIP	0	Q288	8-729-802-80	TRANSISTOR	2SC3661
JR175	1-216-864-11	SHORT CHIP	0	Q301	8-729-027-31	TRANSISTOR	DTA124EKA-T146
JR228	1-216-864-11	SHORT CHIP	0	Q302	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR315	1-216-864-11	SHORT CHIP	0	Q303	8-729-027-31	TRANSISTOR	DTA124EKA-T146
JR316	1-216-864-11	SHORT CHIP	0	Q304	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR318	1-216-864-11	SHORT CHIP	0	Q307	8-729-027-31	TRANSISTOR	DTA124EKA-T146
JR381	1-216-864-11	SHORT CHIP	0	Q308	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR405	1-216-864-11	SHORT CHIP	0	Q486	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR406	1-216-864-11	SHORT CHIP	0	Q584	8-729-027-43	TRANSISTOR	DTC114EKA-T146
JR407	1-216-864-11	SHORT CHIP	0	< RESISTOR >			
JR408	1-216-864-11	SHORT CHIP	0	R101	1-216-812-11	METAL CHIP	180
JR419	1-216-864-11	SHORT CHIP	0	R102	1-216-825-11	METAL CHIP	2.2K
JR467	1-216-864-11	SHORT CHIP	0	R103	1-216-833-11	METAL CHIP	10K
JR480	1-216-864-11	SHORT CHIP	0	R104	1-216-841-11	METAL CHIP	47K
JR481	1-216-864-11	SHORT CHIP	0	R105	1-216-841-11	METAL CHIP	47K
JR487	1-216-864-11	SHORT CHIP	0	R106	1-216-830-11	METAL CHIP	5.6K
JR555	1-216-864-11	SHORT CHIP	0	R107	1-216-829-11	METAL CHIP	4.7K
< COIL >				R108	1-216-825-11	METAL CHIP	2.2K
L103	1-410-780-11	INDUCTOR	27mH	R110	1-216-851-11	METAL CHIP	330K
L104	1-410-780-11	INDUCTOR	27mH	R111	1-216-821-11	METAL CHIP	1K
L105	1-414-189-31	INDUCTOR	100uH	R112	1-216-833-11	METAL CHIP	10K
L505	1-412-064-11	INDUCTOR	100uH	R113	1-216-833-11	METAL CHIP	10K
< TRANSISTOR >				R114	1-216-864-11	SHORT CHIP	0
Q101	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R	R115	1-216-833-11	METAL CHIP	10K
Q103	8-729-802-80	TRANSISTOR	2SC3661	R116	1-216-833-11	METAL CHIP	10K
Q104	8-729-802-80	TRANSISTOR	2SC3661	R117	1-216-825-11	METAL CHIP	2.2K
Q105	8-729-802-80	TRANSISTOR	2SC3661	R118	1-216-835-11	METAL CHIP	15K
Q106	8-729-802-80	TRANSISTOR	2SC3661	R119	1-216-817-11	METAL CHIP	470
Q107	8-729-216-22	TRANSISTOR	2SA1162-G	R120	1-216-829-11	METAL CHIP	4.7K
Q108	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R121	1-216-827-11	METAL CHIP	3.3K
Q109	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R122	1-216-825-11	METAL CHIP	2.2K
Q110	8-729-027-23	TRANSISTOR	DTA114EKA-T146	R123	1-216-825-11	METAL CHIP	2.2K
Q111	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R124	1-216-825-11	METAL CHIP	2.2K
Q112	8-729-141-75	TRANSISTOR	2SD596DV345	R125	1-216-838-11	METAL CHIP	27K
Q113	6-550-185-01	TRANSISTOR	RT1P137P-TP-1	R126	1-216-829-11	METAL CHIP	4.7K
Q114	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R127	1-216-830-11	METAL CHIP	5.6K
Q118	8-729-903-46	TRANSISTOR	2SB1132-P	R128	1-216-837-11	METAL CHIP	22K
Q119	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R129	1-216-829-11	METAL CHIP	4.7K
Q120	8-729-903-46	TRANSISTOR	2SB1132-P	R130	1-216-841-11	METAL CHIP	47K
Q121	8-729-027-43	TRANSISTOR	DTC114EKA-T146	R131	1-216-827-11	METAL CHIP	3.3K
				R133	1-216-857-11	METAL CHIP	1M
							5%
							1/10W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R136	1-216-833-11	METAL CHIP	10K	5%	1/10W	R200	1-216-841-11	METAL CHIP	47K	5%	1/10W
R138	1-216-841-11	METAL CHIP	47K	5%	1/10W	R202	1-216-809-11	METAL CHIP	100	5%	1/10W
R139	1-216-864-11	SHORT CHIP	0			R203	1-216-809-11	METAL CHIP	100	5%	1/10W
R140	1-216-833-11	METAL CHIP	10K	5%	1/10W	R204	1-216-809-11	METAL CHIP	100	5%	1/10W
R141	1-216-833-11	METAL CHIP	10K	5%	1/10W	R205	1-216-809-11	METAL CHIP	100	5%	1/10W
R142	1-216-833-11	METAL CHIP	10K	5%	1/10W	R207	1-216-809-11	METAL CHIP	100	5%	1/10W
R143	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R209	1-216-809-11	METAL CHIP	100	5%	1/10W
R144	1-216-805-11	METAL CHIP	47	5%	1/10W	R210	1-216-809-11	METAL CHIP	100	5%	1/10W
R145	1-216-833-11	METAL CHIP	10K	5%	1/10W	R212	1-216-809-11	METAL CHIP	100	5%	1/10W
R146	1-216-797-11	METAL CHIP	10	5%	1/10W	R214	1-216-864-11	SHORT CHIP	0		
R147	1-216-803-11	METAL CHIP	33	5%	1/10W	R215	1-216-821-11	METAL CHIP	1K	5%	1/10W
R148	1-216-841-11	METAL CHIP	47K	5%	1/10W	R216	1-216-813-11	METAL CHIP	220	5%	1/10W
R149	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R220	1-216-809-11	METAL CHIP	100	5%	1/10W
R150	1-216-841-11	METAL CHIP	47K	5%	1/10W	R221	1-216-809-11	METAL CHIP	100	5%	1/10W
R151	1-216-812-11	METAL CHIP	180	5%	1/10W	R222	1-216-809-11	METAL CHIP	100	5%	1/10W
R152	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R224	1-216-809-11	METAL CHIP	100	5%	1/10W
R153	1-216-833-11	METAL CHIP	10K	5%	1/10W	R225	1-216-839-11	METAL CHIP	33K	5%	1/10W
R154	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R226	1-216-809-11	METAL CHIP	100	5%	1/10W
R155	1-216-841-11	METAL CHIP	47K	5%	1/10W	R227	1-216-864-11	SHORT CHIP	0		
R156	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R230	1-216-809-11	METAL CHIP	100	5%	1/10W
R158	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R231	1-216-841-11	METAL CHIP	47K	5%	1/10W
R159	1-469-125-21	FERRITE, EMI (SMD) (1608)				R244	1-216-821-11	METAL CHIP	1K	5%	1/10W
R160	1-216-851-11	METAL CHIP	330K	5%	1/10W	R245	1-216-841-11	METAL CHIP	47K	5%	1/10W
R161	1-216-821-11	METAL CHIP	1K	5%	1/10W	R246	1-216-833-11	METAL CHIP	10K	5%	1/10W
R162	1-216-833-11	METAL CHIP	10K	5%	1/10W	R248	1-216-821-11	METAL CHIP	1K	5%	1/10W
R163	1-216-833-11	METAL CHIP	10K	5%	1/10W	R249	1-216-841-11	METAL CHIP	47K	5%	1/10W
R164	1-216-864-11	SHORT CHIP	0			R250	1-216-833-11	METAL CHIP	10K	5%	1/10W
R165	1-469-125-21	FERRITE, EMI (SMD) (1608)				R294	1-216-821-11	METAL CHIP	1K	5%	1/10W
R166	1-216-833-11	METAL CHIP	10K	5%	1/10W	R295	1-216-841-11	METAL CHIP	47K	5%	1/10W
R167	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R296	1-216-833-11	METAL CHIP	10K	5%	1/10W
R168	1-216-835-11	METAL CHIP	15K	5%	1/10W	R298	1-216-821-11	METAL CHIP	1K	5%	1/10W
R169	1-216-817-11	METAL CHIP	470	5%	1/10W	R299	1-216-841-11	METAL CHIP	47K	5%	1/10W
R172	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R300	1-216-833-11	METAL CHIP	10K	5%	1/10W
R173	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R301	1-216-833-11	METAL CHIP	10K	5%	1/10W
R174	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R302	1-216-837-11	METAL CHIP	22K	5%	1/10W
R175	1-216-838-11	METAL CHIP	27K	5%	1/10W	R303	1-216-845-11	METAL CHIP	100K	5%	1/10W
R176	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R304	1-216-835-11	METAL CHIP	15K	5%	1/10W
R177	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	R305	1-216-843-11	METAL CHIP	68K	5%	1/10W
R178	1-216-819-11	METAL CHIP	680	5%	1/10W	R308	1-216-853-11	METAL CHIP	470K	5%	1/10W
R179	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R309	1-216-833-11	METAL CHIP	10K	5%	1/10W
R180	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R310	1-216-835-11	METAL CHIP	15K	5%	1/10W
R181	1-216-819-11	METAL CHIP	680	5%	1/10W	R311	1-216-843-11	METAL CHIP	68K	5%	1/10W
R182	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R312	1-216-853-11	METAL CHIP	470K	5%	1/10W
R183	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R323	1-216-833-11	METAL CHIP	10K	5%	1/10W
R184	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R329	1-216-833-11	METAL CHIP	10K	5%	1/10W
R186	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R330	1-216-833-11	METAL CHIP	10K	5%	1/10W
R188	1-216-841-11	METAL CHIP	47K	5%	1/10W	R337	1-216-833-11	METAL CHIP	10K	5%	1/10W
R189	1-216-864-11	SHORT CHIP	0			R338	1-216-833-11	METAL CHIP	10K	5%	1/10W
R190	1-216-833-11	METAL CHIP	10K	5%	1/10W	R340	1-216-833-11	METAL CHIP	10K	5%	1/10W
R191	1-216-817-11	METAL CHIP	470	5%	1/10W	R341	1-216-833-11	METAL CHIP	10K	5%	1/10W
R192	1-216-817-11	METAL CHIP	470	5%	1/10W	R354	1-216-833-11	METAL CHIP	10K	5%	1/10W
R193	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R355	1-216-833-11	METAL CHIP	10K	5%	1/10W
R194	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R372	1-216-833-11	METAL CHIP	10K	5%	1/10W
R195	1-216-857-11	METAL CHIP	1M	5%	1/10W	R373	1-216-833-11	METAL CHIP	10K	5%	1/10W
R196	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R374	1-216-833-11	METAL CHIP	10K	5%	1/10W
R197	1-216-819-11	METAL CHIP	680	5%	1/10W	R381	1-216-864-11	SHORT CHIP	0		
R198	1-469-125-21	FERRITE, EMI (SMD) (1608)				R385	1-216-833-11	METAL CHIP	10K	5%	1/10W
R199	1-469-125-21	FERRITE, EMI (SMD) (1608)				R392	1-216-864-11	SHORT CHIP	0		

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**MAIN** **MIC**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark	
R393	1-216-811-11	METAL CHIP	150 5% 1/10W (E13)	R474	1-216-809-11	METAL CHIP	100 5% 1/10W	
R393	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (E3,E12,E15,EA)	R476	1-216-809-11	METAL CHIP	100 5% 1/10W	
R394	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R477	1-216-809-11	METAL CHIP	100 5% 1/10W	
R395	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R478	1-216-809-11	METAL CHIP	100 5% 1/10W	
R397	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R479	1-216-809-11	METAL CHIP	100 5% 1/10W	
R401	1-216-809-11	METAL CHIP	100 5% 1/10W	R483	1-216-809-11	METAL CHIP	100 5% 1/10W	
R402	1-216-809-11	METAL CHIP	100 5% 1/10W	R484	1-216-809-11	METAL CHIP	100 5% 1/10W	
R404	1-216-809-11	METAL CHIP	100 5% 1/10W	R485	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	
R411	1-216-851-11	METAL CHIP	330K 5% 1/10W	R488	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	
R412	1-216-845-11	METAL CHIP	100K 5% 1/10W	R489	1-216-809-11	METAL CHIP	100 5% 1/10W	
R413	1-216-864-11	SHORT CHIP	0	R490	1-216-809-11	METAL CHIP	100 5% 1/10W	
R417	1-216-833-11	METAL CHIP	10K 5% 1/10W	R491	1-216-809-11	METAL CHIP	100 5% 1/10W	
R420	1-216-821-11	METAL CHIP	1K 5% 1/10W	R493	1-216-815-11	METAL CHIP	330 5% 1/10W (E3,E15)	
R421	1-216-809-11	METAL CHIP	100 5% 1/10W	R493	1-216-819-11	METAL CHIP	680 5% 1/10W (E12)	
R422	1-216-809-11	METAL CHIP	100 5% 1/10W	R493	1-216-827-11	METAL CHIP	3.3K 5% 1/10W (EA)	
R423	1-216-809-11	METAL CHIP	100 5% 1/10W	R493	1-216-829-11	METAL CHIP	4.7K 5% 1/10W (E13)	
R424	1-216-809-11	METAL CHIP	100 5% 1/10W	R493	1-216-864-11	SHORT CHIP	0 (MY,SP,PH,TH)	
R425	1-216-809-11	METAL CHIP	100 5% 1/10W	R494	1-216-813-11	METAL CHIP	220 5% 1/10W	
R426	1-216-809-11	METAL CHIP	100 5% 1/10W	R495	1-216-813-11	METAL CHIP	220 5% 1/10W	
R427	1-216-809-11	METAL CHIP	100 5% 1/10W	R497	1-216-813-11	METAL CHIP	220 5% 1/10W	
R428	1-216-809-11	METAL CHIP	100 5% 1/10W	R500	1-216-809-11	METAL CHIP	100 5% 1/10W	
R429	1-216-809-11	METAL CHIP	100 5% 1/10W	△ R506	1-219-153-11	FUSIBLE	10 5% 1/4W F	
R430	1-216-809-11	METAL CHIP	100 5% 1/10W	R508	1-216-830-11	METAL CHIP	5.6K 5% 1/10W	
R431	1-216-809-11	METAL CHIP	100 5% 1/10W	R509	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	
R432	1-216-809-11	METAL CHIP	100 5% 1/10W	R532	1-216-864-11	SHORT CHIP	0	
R433	1-216-809-11	METAL CHIP	100 5% 1/10W	R582	1-216-864-11	SHORT CHIP	0	
R435	1-216-809-11	METAL CHIP	100 5% 1/10W	R584	1-216-830-11	METAL CHIP	5.6K 5% 1/10W	
R436	1-216-809-11	METAL CHIP	100 5% 1/10W	R585	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R437	1-216-809-11	METAL CHIP	100 5% 1/10W	R586	1-216-830-11	METAL CHIP	5.6K 5% 1/10W	
R438	1-216-809-11	METAL CHIP	100 5% 1/10W	R587	1-216-841-11	METAL CHIP	47K 5% 1/10W	
R439	1-216-809-11	METAL CHIP	100 5% 1/10W	R590	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R440	1-216-809-11	METAL CHIP	100 5% 1/10W	R591	1-216-833-11	METAL CHIP	10K 5% 1/10W	
R441	1-216-809-11	METAL CHIP	100 5% 1/10W	R592	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R442	1-216-809-11	METAL CHIP	100 5% 1/10W	R593	1-216-845-11	METAL CHIP	100K 5% 1/10W	
R443	1-216-809-11	METAL CHIP	100 5% 1/10W	< TRANSFORMER >				
R444	1-216-809-11	METAL CHIP	100 5% 1/10W	T101	1-433-372-11	TRANSFORMER, BIAS OSCILLATION		
R445	1-216-809-11	METAL CHIP	100 5% 1/10W	< VIBRATOR >				
R446	1-216-809-11	METAL CHIP	100 5% 1/10W	X401	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)		
R447	1-216-809-11	METAL CHIP	100 5% 1/10W	X402	1-795-058-21	VIBRATOR, CERAMIC (5MHz)		
R448	1-216-809-11	METAL CHIP	100 5% 1/10W	*****				
R449	1-216-809-11	METAL CHIP	100 5% 1/10W	A-1167-725-A MIC BOARD, COMPLETE				
R450	1-216-809-11	METAL CHIP	100 5% 1/10W	*****				
R451	1-216-809-11	METAL CHIP	100 5% 1/10W	< CAPACITOR >				
R452	1-216-809-11	METAL CHIP	100 5% 1/10W	C1401	1-100-597-11	CERAMIC CHIP	0.1uF 10% 25V	
R453	1-216-809-11	METAL CHIP	100 5% 1/10W	C1411	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	
R454	1-216-809-11	METAL CHIP	100 5% 1/10W	C1415	1-100-597-11	CERAMIC CHIP	0.1uF 10% 25V	
R455	1-216-809-11	METAL CHIP	100 5% 1/10W	C1416	1-124-257-00	ELECT	2.2uF 20% 50V	
R456	1-216-812-11	METAL CHIP	180 5% 1/10W	C1417	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	
R457	1-216-809-11	METAL CHIP	100 5% 1/10W	C1418	1-162-963-11	CERAMIC CHIP	680PF 10% 50V	
R458	1-216-809-11	METAL CHIP	100 5% 1/10W	C1424	1-100-597-11	CERAMIC CHIP	0.1uF 10% 25V	
R459	1-216-809-11	METAL CHIP	100 5% 1/10W					
R460	1-216-809-11	METAL CHIP	100 5% 1/10W					
R463	1-216-809-11	METAL CHIP	100 5% 1/10W					
R465	1-216-809-11	METAL CHIP	100 5% 1/10W					
R472	1-216-809-11	METAL CHIP	100 5% 1/10W					
R473	1-216-809-11	METAL CHIP	100 5% 1/10W					

**MIC**   **MOTOR (LD)**   **MOTOR (TB)**   **PANEL**

# HCD-GNZ55D

**PANEL** **SENSOR**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< CONNECTOR >				R1326	1-216-817-11	METAL CHIP	470 5% 1/10W
CN1402	1-784-747-11	CONNECTOR, FFC 25P		R1327	1-216-819-11	METAL CHIP	680 5% 1/10W
CN1452	1-785-336-11	PIN, CONNECTOR (LIGHT ANGLE) 10P		R1328	1-216-821-11	METAL CHIP	1K 5% 1/10W
CN1453	1-818-282-11	PIN, CONNECTOR (PWB) 3P		R1330	1-216-815-11	METAL CHIP	330 5% 1/10W
< DIODE >				R1331	1-216-817-11	METAL CHIP	470 5% 1/10W
D1300	6-501-193-01	DIODE 1SS355WTE-17		R1332	1-216-819-11	METAL CHIP	680 5% 1/10W
D1301	6-501-193-01	DIODE 1SS355WTE-17		R1344	1-216-864-11	SHORT CHIP	0
D1302	6-501-193-01	DIODE 1SS355WTE-17		R1351	1-216-809-11	METAL CHIP	100 5% 1/10W
D1303	6-501-193-01	DIODE 1SS355WTE-17		R1352	1-216-809-11	METAL CHIP	100 5% 1/10W
D1304	6-500-809-01	LED SELU5223C-STP15 (STANDBY)		R1353	1-216-809-11	METAL CHIP	100 5% 1/10W
D1305	8-719-059-18	DIODE RD6.2FM-T1		R1355	1-216-809-11	METAL CHIP	100 5% 1/10W
D1306	6-501-193-01	DIODE 1SS355WTE-17		R1356	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
D1314	6-501-193-01	DIODE 1SS355WTE-17		R1357	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
< VACUUM FLUORESCENT DISPLAY >				R1358	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
FL1300	1-519-859-11	VACUUM FLUORESCENT DISPLAY		R1359	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
< SWITCH >				R1360	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
< IC >				R1361	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
IC1300	6-709-115-11	IC NJU3427FA2		S1300	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)	
< JUMPER RESISTOR >				S1301	1-762-875-21	SWITCH, KEYBOARD (I/D)	
JR1305	1-216-864-11	SHORT CHIP 0		S1309	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)	
< COIL >				S1310	1-762-875-21	SWITCH, KEYBOARD (II)	
L1300	1-410-671-31	INDUCTOR 47uH		S1311	1-762-875-21	SWITCH, KEYBOARD (◀▶)	
< TRANSISTOR >				S1312	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP/EX-CHANGE)	
Q1300	6-550-065-01	FET CPH5504-TL-E		S1313	1-762-875-21	SWITCH, KEYBOARD (DISC 3)	
Q1305	8-729-027-50	TRANSISTOR DTC123JKA-T146		S1314	1-762-875-21	SWITCH, KEYBOARD (DISC 2)	
Q1307	8-729-027-50	TRANSISTOR DTC123JKA-T146		S1315	1-762-875-21	SWITCH, KEYBOARD (DISC 1)	
Q1311	8-729-027-56	TRANSISTOR DTC143TKA-T146		S1316	1-762-875-21	SWITCH, KEYBOARD (▲ OPEN/CLOSE)	
Q1312	8-729-027-56	TRANSISTOR DTC143TKA-T146		S1317	1-762-875-21	SWITCH, KEYBOARD (■)	
Q1313	8-729-027-56	TRANSISTOR DTC143TKA-T146		S1320	1-762-875-21	SWITCH, KEYBOARD (DIRECTION)	
Q1314	8-729-027-56	TRANSISTOR DTC143TKA-T146		S1321	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)	
Q1315	8-729-027-56	TRANSISTOR DTC143TKA-T146		S1322	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)	
Q1316	8-729-027-56	TRANSISTOR DTC143TKA-T146		S1323	1-762-875-21	SWITCH, KEYBOARD (DVD)	
< RESISTOR >				S1324	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)	
R1300	1-216-827-11	METAL CHIP 3.3K	5% 1/10W	S1325	1-762-875-21	SWITCH, KEYBOARD (TUNING -◀◀◀)	
R1301	1-216-837-11	METAL CHIP 22K	5% 1/10W	S1326	1-762-875-21	SWITCH, KEYBOARD (TUNING +▶▶▶)	
R1302	1-216-837-11	METAL CHIP 22K	5% 1/10W	S1327	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)	
R1303	1-216-809-11	METAL CHIP 100	5% 1/10W	< TRANSFORMER >			
R1304	1-216-809-11	METAL CHIP 100	5% 1/10W	T1300	1-443-894-11	TRANSFORMER, DC/DC CONVERTER	
△ R1305	1-215-871-11	METAL OXIDE 2.2K	5% 1W F	*****			
R1307	1-216-829-11	METAL CHIP 4.7K	5% 1/10W	1-687-132-12 SENSOR BOARD			
R1308	1-216-821-11	METAL CHIP 1K	5% 1/10W	*****			
R1314	1-216-864-11	SHORT CHIP 0		< CONNECTOR >			
R1318	1-216-829-11	METAL CHIP 4.7K	5% 1/10W	CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P	
R1319	1-216-825-11	METAL CHIP 2.2K	5% 1/10W	< IC >			
R1320	1-216-823-11	METAL CHIP 1.5K	5% 1/10W	IC731	6-600-022-01	IC RPI-576	
R1321	1-216-821-11	METAL CHIP 1K	5% 1/10W	*****			
R1322	1-216-819-11	METAL CHIP 680	5% 1/10W				
R1323	1-216-817-11	METAL CHIP 470	5% 1/10W				
R1324	1-216-815-11	METAL CHIP 330	5% 1/10W				
R1325	1-216-815-11	METAL CHIP 330	5% 1/10W				

Ref. No.	Part No.	Description			Remark		Ref. No.	Part No.	Description			Remark	
		SPEAKER BOARD			*****		C647	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	
		< CAPACITOR >			*****		C648	1-126-947-11	ELECT	47uF	20%	35V	
C1502	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C649	1-126-947-11	ELECT	47uF	20%	35V	
C1512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C650	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	
C1522	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C651	1-162-961-11	CERAMIC CHIP	330PF	10%	50V	
C1532	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		C652	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V	
	< CONNECTOR >			*****			C653	1-127-573-11	CERAMIC CHIP	1uF	10%	16V	
CN1501	1-564-507-11	PLUG, CONNECTOR 4P					C654	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	
	< EARTH TERMINAL >			*****			C655	1-126-953-11	ELECT	2200uF	20%	35V	
* EP1500	1-537-738-21	TERMINAL, EARTH					C656	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	
* EP1501	1-537-738-21	TERMINAL, EARTH					C657	1-126-953-11	ELECT	2200uF	20%	35V	
	< TERMINAL BOARD >			*****			C680	1-136-177-00	FILM	1uF	5%	50V	
TM1500	1-820-067-11	TERMINAL BOARD (SPEAKER)					C681	1-125-898-11	CERAMIC CHIP	0.22uF	10%	50V	
	(FRONT SPEAKER)			*****			C682	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
	*****			*****			C683	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
	1-687-669-12	SW BOARD					C684	1-136-177-00	FILM	1uF	5%	50V	
	*****			*****			C685	1-125-898-11	CERAMIC CHIP	0.22uF	10%	50V	
	< SWITCH >			*****			C686	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
S751	1-786-514-11	SWITCH, LEVER (SLIDE)					C687	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
	(OPEN/CLOSE DETECT)			*****			C690	1-136-177-00	FILM	1uF	5%	50V	
	*****			*****			C691	1-125-898-11	CERAMIC CHIP	0.22uF	10%	50V	
	A-1164-101-A	S-MASTER BOARD, COMPLETE					C692	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
	*****			*****			C693	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
	< CAPACITOR >			*****			C694	1-136-177-00	FILM	1uF	5%	50V	
C604	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C695	1-125-898-11	CERAMIC CHIP	0.22uF	10%	50V	
C605	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C696	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C606	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C697	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C607	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C800	1-124-248-00	ELECT	22uF	20%	25V	
C608	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C801	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C609	1-104-658-11	ELECT	100uF	20%	10V		C805	1-104-658-11	ELECT	100uF	20%	10V	
C610	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C806	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C611	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C809	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C612	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C810	1-104-658-11	ELECT	100uF	20%	10V	
C613	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C811	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
C631	1-127-573-11	CERAMIC CHIP	1uF	10%	16V		C819	1-104-662-11	ELECT	22uF	20%	25V	
C632	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C821	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V	
C633	1-126-933-11	ELECT	100uF	20%	16V		C822	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	
C634	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		C823	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	
C635	1-127-573-11	CERAMIC CHIP	1uF	10%	16V		C830	1-126-964-11	ELECT	10uF	20%	50V	
C636	1-127-573-11	CERAMIC CHIP	1uF	10%	16V		C840	1-164-337-11	CERAMIC CHIP	2.2uF	16V		
C637	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V		C860	1-117-370-11	CERAMIC CHIP	10uF	10V		
C638	1-162-961-11	CERAMIC CHIP	330PF	10%	50V		C865	1-117-370-11	CERAMIC CHIP	10uF	10V		
C639	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V		C871	1-216-864-11	SHORT CHIP	0			
C640	1-126-947-11	ELECT	47uF	20%	35V		C872	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C641	1-126-947-11	ELECT	47uF	20%	35V		C874	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C642	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V		C876	1-216-864-11	SHORT CHIP	0			
C643	1-162-961-11	CERAMIC CHIP	330PF	10%	50V		C877	1-216-864-11	SHORT CHIP	0			
C644	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V		C878	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	
C645	1-163-078-11	CERAMIC CHIP	0.033uF	10%	25V		C880	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
C646	1-162-961-11	CERAMIC CHIP	330PF	10%	50V		C881	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
	< CONNECTOR >			*****			C882	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
	< EARTH TERMINAL >			*****			C883	1-126-925-11	ELECT	470uF	20%	10V	
	< TERMINAL BOARD >			*****			C884	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
	< SW BOARD >			*****			C885	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
	< S-MASTER BOARD >			*****			C886	1-126-935-11	ELECT	470uF	20%	16V	
	< CERAMIC CHIP >			*****			C887	1-126-925-11	ELECT	470uF	20%	10V	
	< FILM >			*****			C888	1-119-774-11	ELECT	100uF	20%	16V	

**S-MASTER**

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark	
C889	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	JR804	1-216-864-11	SHORT CHIP	0			
C890	1-119-774-11	ELECT	100uF	20%	16V			< COIL >				
C891	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	L680	1-457-235-11	COIL, CHOKE	10uH			
C892	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	L681	1-457-235-11	COIL, CHOKE	10uH			
		< CONNECTOR >				L690	1-457-235-11	COIL, CHOKE	10uH			
CN500	1-784-776-11	CONNECTOR, FFC 15P				L691	1-457-235-11	COIL, CHOKE	10uH			
* CN501	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				L800	1-216-295-11	SHORT CHIP	0			
* CN502	1-564-243-11	PIN, CONNECTOR (3.96mm PITCH) 6P				L802	1-216-295-11	SHORT CHIP	0			
CN503	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				L804	1-412-939-11	INDUCTOR	1uH			
		< DIODE >						< TRANSISTOR >				
D651	6-500-260-01	DIODE	P6SMB39AT3			Q840	8-729-120-28	TRANSISTOR	2SC1623-L5L6			
D652	6-500-260-01	DIODE	P6SMB39AT3			Q860	8-729-602-36	TRANSISTOR	2SA1602-F			
D653	6-500-260-01	DIODE	P6SMB39AT3			Q861	8-729-602-36	TRANSISTOR	2SA1602-F			
D654	6-500-260-01	DIODE	P6SMB39AT3			Q865	8-729-602-36	TRANSISTOR	2SA1602-F			
D820	8-719-988-61	DIODE	ISS355TE-17			Q866	8-729-602-36	TRANSISTOR	2SA1602-F			
D880	8-719-988-61	DIODE	ISS355TE-17					< RESISTOR >				
D881	8-719-988-61	DIODE	ISS355TE-17			R600	1-216-864-11	SHORT CHIP	0			
D882	8-719-988-61	DIODE	ISS355TE-17			R601	1-216-864-11	SHORT CHIP	0			
D883	8-719-988-61	DIODE	ISS355TE-17			R602	1-216-833-11	METAL CHIP	10K	5%	1/10W	
D884	1-216-295-11	SHORT CHIP	0			R603	1-216-809-11	METAL CHIP	100	5%	1/10W	
D885	1-216-295-11	SHORT CHIP	0			R605	1-216-817-11	METAL CHIP	470	5%	1/10W	
D888	1-216-295-11	SHORT CHIP	0			R606	1-216-817-11	METAL CHIP	470	5%	1/10W	
D889	1-216-295-11	SHORT CHIP	0			R607	1-216-817-11	METAL CHIP	470	5%	1/10W	
D890	1-216-295-11	SHORT CHIP	0			R609	1-216-864-11	SHORT CHIP	0			
D891	1-216-295-11	SHORT CHIP	0			R611	1-216-864-11	SHORT CHIP	0			
D892	8-719-988-61	DIODE	ISS355TE-17			R612	1-216-833-11	METAL CHIP	10K	5%	1/10W	
D893	8-719-988-61	DIODE	ISS355TE-17			R616	1-216-809-11	METAL CHIP	100	5%	1/10W	
D894	1-216-295-11	SHORT CHIP	0			R617	1-216-809-11	METAL CHIP	100	5%	1/10W	
D895	1-216-295-11	SHORT CHIP	0			R619	1-216-821-11	METAL CHIP	1K	5%	1/10W	
		< GROUND TERMINAL >				R620	1-216-821-11	METAL CHIP	1K	5%	1/10W	
EP880	1-537-738-21	TERMINAL, GROUND				R621	1-216-821-11	METAL CHIP	1K	5%	1/10W	
EP881	1-537-738-21	TERMINAL, GROUND				R631	1-216-791-11	METAL CHIP	3.3	5%	1/10W	
EP882	1-537-738-21	TERMINAL, GROUND				R632	1-216-809-11	METAL CHIP	100	5%	1/10W	
EP884	1-537-738-21	TERMINAL, GROUND				R633	1-216-809-11	METAL CHIP	100	5%	1/10W	
EP885	1-537-738-21	TERMINAL, GROUND				R636	1-216-809-11	METAL CHIP	100	5%	1/10W	
EP886	1-537-738-21	TERMINAL, GROUND				R639	1-216-835-11	METAL CHIP	15K	5%	1/10W	
		< JUMPER RESISTOR >				R644	1-216-864-11	SHORT CHIP	0			
FB800	1-216-864-11	SHORT CHIP	0			R645	1-216-864-11	SHORT CHIP	0			
FB802	1-216-864-11	SHORT CHIP	0			R648	1-216-809-11	METAL CHIP	100	5%	1/10W	
FB881	1-216-295-11	SHORT CHIP	0			R651	1-216-791-11	METAL CHIP	3.3	5%	1/10W	
		< FILTER >				R652	1-216-791-11	METAL CHIP	3.3	5%	1/10W	
FL800	1-234-177-21	FILTER, CHIP EMI				R653	1-216-791-11	METAL CHIP	3.3	5%	1/10W	
FL810	1-234-177-21	FILTER, CHIP EMI				R654	1-216-800-11	METAL CHIP	18	5%	1/10W	
		< IC >				R655	1-216-800-11	METAL CHIP	18	5%	1/10W	
IC600	6-707-939-01	IC	CXD9843AR			R656	1-216-800-11	METAL CHIP	18	5%	1/10W	
IC630	6-707-629-01	IC	CXD9845M			R657	1-216-800-11	METAL CHIP	18	5%	1/10W	
IC802	6-701-189-01	IC	MC74VHC1GU04DFT1			R658	1-216-791-11	METAL CHIP	3.3	5%	1/10W	
IC810	6-700-263-01	IC	NJM2870F18(TE2)			R681	1-216-790-11	METAL CHIP	2.7	5%	1/10W	
IC880	8-759-422-21	IC	NJM4580V(TE2)			R683	1-216-790-11	METAL CHIP	2.7	5%	1/10W	
		< JUMPER RESISTOR >				R691	1-216-790-11	METAL CHIP	2.7	5%	1/10W	
JR800	1-216-864-11	SHORT CHIP	0			R697	1-216-790-11	METAL CHIP	2.7	5%	1/10W	
		< JUMPER RESISTOR >				R803	1-216-857-11	METAL CHIP	1M	5%	1/10W	
		< JUMPER RESISTOR >				R804	1-216-864-11	SHORT CHIP	0			
		< JUMPER RESISTOR >				R805	1-216-864-11	SHORT CHIP	0			
		< JUMPER RESISTOR >				R806	1-216-864-11	SHORT CHIP	0			

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R807	1-216-864-11	SHORT CHIP	0	C1885	1-126-916-11	ELECT	1000uF 20% 6.3V
R808	1-216-864-11	SHORT CHIP	0	C1886	1-126-960-11	ELECT	1uF 20% 50V
R810	1-216-864-11	SHORT CHIP	0	C1887	1-126-916-11	ELECT	1000uF 20% 6.3V
R811	1-216-845-11	METAL CHIP	100K 5% 1/10W	C1888	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
R820	1-216-837-11	METAL CHIP	22K 5% 1/10W				< CONNECTOR >
R821	1-216-828-11	METAL CHIP	3.9K 5% 1/10W	* CN1880	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P	
R824	1-216-837-11	METAL CHIP	22K 5% 1/10W	CN1966	1-779-273-11	CONNECTOR, FFC (LIF(NON-ZIF)) 5P	
R825	1-216-837-11	METAL CHIP	22K 5% 1/10W				< GROUND TERMINAL >
R827	1-216-864-11	SHORT CHIP	0				EPT1970 1-537-738-21 TERMINAL, GROUND
R840	1-216-845-11	METAL CHIP	100K 5% 1/10W				< JUMPER RESISTOR >
R841	1-216-864-11	SHORT CHIP	0	FB1976	1-216-864-11	SHORT CHIP	0
R842	1-216-864-11	SHORT CHIP	0	FB1979	1-216-864-11	SHORT CHIP	0
R843	1-216-864-11	SHORT CHIP	0				< IC >
R844	1-216-864-11	SHORT CHIP	0	IC1800	6-600-495-01	IC MM1671XNRE	
R845	1-216-864-11	SHORT CHIP	0	IC1802	8-759-653-07	IC PQ09RD21J00H	
R860	1-216-845-11	METAL CHIP	100K 5% 1/10W	IC1803	6-707-921-01	IC PQ3RD13J000H	
R861	1-216-845-11	METAL CHIP	100K 5% 1/10W	IC1804	8-759-471-81	IC PQ05RD11J00H	
R862	1-216-845-11	METAL CHIP	100K 5% 1/10W				< JACK >
R865	1-216-845-11	METAL CHIP	100K 5% 1/10W	J1900	1-774-227-11	JACK, PIN 1P (VIDEO OUT)	
R866	1-216-845-11	METAL CHIP	100K 5% 1/10W				< JUMPER RESISTOR >
R867	1-216-845-11	METAL CHIP	100K 5% 1/10W	JR1914	1-216-864-11	SHORT CHIP	0
R868	1-216-841-11	METAL CHIP	47K 5% 1/10W				< COIL >
R869	1-216-841-11	METAL CHIP	47K 5% 1/10W				< TRANSISTOR >
R880	1-216-837-11	METAL CHIP	22K 5% 1/10W	Q1970	8-729-027-43	TRANSISTOR DTC114EKA-T146	
R881	1-216-837-11	METAL CHIP	22K 5% 1/10W	Q1971	8-729-027-43	TRANSISTOR DTC114EKA-T146	
R882	1-216-837-11	METAL CHIP	22K 5% 1/10W				< RESISTOR >
R883	1-216-837-11	METAL CHIP	22K 5% 1/10W	R1940	1-216-833-11	METAL CHIP	10K 5% 1/10W
R884	1-216-837-11	METAL CHIP	22K 5% 1/10W	R1941	1-218-285-11	METAL CHIP	75 5% 1/10W
R885	1-216-839-11	METAL CHIP	33K 5% 1/10W	R1942	1-216-845-11	METAL CHIP	100K 5% 1/10W
R886	1-216-864-11	SHORT CHIP	0	R1947	1-216-833-11	METAL CHIP	10K 5% 1/10W
R887	1-216-837-11	METAL CHIP	22K 5% 1/10W				< VIBRATOR >
R888	1-216-837-11	METAL CHIP	22K 5% 1/10W				
R889	1-216-837-11	METAL CHIP	22K 5% 1/10W				
R890	1-216-837-11	METAL CHIP	22K 5% 1/10W				
R891	1-216-839-11	METAL CHIP	33K 5% 1/10W				
R892	1-216-864-11	SHORT CHIP	0				
R893	1-216-826-11	METAL CHIP	2.7K 5% 1/10W				
R894	1-216-825-11	METAL CHIP	2.2K 5% 1/10W				
R895	1-216-837-11	METAL CHIP	22K 5% 1/10W				
X801	1-795-660-21	QUARTZ CRYSTAL UNIT (49MHz)					
							*****
A-1164-023-A	VIDEO BOARD, COMPLETE						VOLUME BOARD
							*****
7-685-646-79	SCREW +BVTP 3X8 TYPE2 TT (B)						< CAPACITOR >
C1850	1-126-916-11	ELECT	1000uF 20% 6.3V	C1334	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C1851	1-126-960-11	ELECT	1uF 20% 50V				< DIODE >
C1871	1-216-864-11	SHORT CHIP	0	D1309	6-500-809-01	LED SELU5223C-STP15	(RING ILLUMINATION)
C1876	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	D1312	6-500-809-01	LED SELU5223C-STP15	(RING ILLUMINATION)
C1878	1-164-156-11	CERAMIC CHIP	0.1uF 25V				
C1881	1-104-658-11	ELECT	100uF 20% 10V				< JUMPER RESISTOR >
C1882	1-126-960-11	ELECT	1uF 20% 50V	JR1300	1-216-864-11	SHORT CHIP	0
C1883	1-126-926-11	ELECT	1000uF 20% 10V	JR1301	1-216-864-11	SHORT CHIP	0
C1884	1-126-960-11	ELECT	1uF 20% 50V				

**VOLUME**

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>		
JR1302	1-216-864-11	SHORT CHIP	0		
< RESISTOR >					
R1310	1-216-864-11	SHORT CHIP	0		
R1329	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R1333	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1334	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R1335	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R1336	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1337	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1368	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1369	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1370	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1377	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1378	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1379	1-216-821-11	METAL CHIP	1K	5%	1/10W
< SWITCH >					
S1305	1-418-725-41	ENCODER, ROTARY (12 TYPE) (MASTER VOLUME)			
S1306	1-786-289-11	SWITCH, DETECTION <i>(◀◀ OPERATION DIAL ▶▶)</i>			
S1318	1-762-875-21	SWITCH, KEYBOARD (EQ BAND/MEMORY)			
S1319	1-762-875-21	SWITCH, KEYBOARD (SOUND FIELD)			
S1328	1-762-875-21	SWITCH, KEYBOARD (RESET EQ)			
S1331	1-762-875-21	SWITCH, KEYBOARD (GROOVE)			
***** MISCELLANEOUS *****					
6	1-828-955-11	WIRE (FLAT TYPE) (9 CORE)			
52	1-417-657-11	MECHA DECK			
58	1-829-030-11	WIRE (FLAT TYPE) (25 CORE)			
59	1-827-720-11	WIRE (FLAT TYPE) (11 CORE)			
△205	1-479-627-11	POWER UNIT			
207	1-828-985-11	WIRE (FLAT TYPE) (15 CORE)			
△209	1-824-642-21	CORD, POWER (WITH CONNECTOR) (TH)			
△209	1-830-188-11	CORD, POWER (EXCEPT TH)			
252	1-828-589-11	WIRE (FLAT TYPE) (13 CORE)			
253	1-828-286-11	WIRE (FLAT TYPE) (5 CORE)			
254	1-828-614-11	WIRE (FLAT TYPE) (17 CORE)			
302	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)			
353	1-828-973-11	WIRE (FLAT TYPE) (13 CORE)			
370	1-828-252-51	WIRE (FLAT TYPE) (24 CORE)			
△371	8-820-291-02	OPTICAL PICK-UP (KHM-310CAB/C2RP)			
FC901	1-500-497-11	FILTER, CLAMP (FERRITE CORE)			
M741	A-1108-965-A	MOTOR ASSY, TABLE (TABLE)			
M751	A-1108-966-A	MOTOR ASSY, LOADING (LOADING)			
RE701	1-477-680-12	ENCODER, ROTARY <i>(DISC TRAY ADDRESS DETECT)</i>			
TU901	1-693-702-11	TUNER (FM/AM) (TM10SE)			

MEMO

## **REVISION HISTORY**

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